November 1956

Leading Publication in the World of Offset-Letterpress Printing

Andand

Dinter

Linter

Small Printers Need Help to Learn Costs

How to Build a Lithographic Sales Force

Causes of Paper Pick—How to Measure It

Water Color Inks for Screen Process Work

Two Firms Merge, Build Combination Plant

Linotype Leads the

Typographic Field



The reason-unmatched typographic resources!

Consider Rudolph Ruzicka, for example, the distinguished American designer who has produced such modern faces as Fairfield Medium and Primer.

Mr. Ruzicka is rated among America's most impressive talents, and his work is available to Linotype whenever the occasion arises for developing contemporary type faces or creating new ones. That's the integrity of Linotype's basic approach to typographic development. Find the right man! Utilize the outstanding individuals . . . the best in the field!

The results of this approach have been impressive, as Linotype faces have consistently won the majority of awards in Ayer contests and graphic arts shows. For example, in the recent A.I.G.A. Fifty Books Exhibition, 32 of the volumes were Linotype-set. And Linotype has sustained that average over the years.

Rely on Linotype-first in typographic resources!



"Ruzicka's types possess the intrinsic qualities of fine letter forms so characteristic of 'classic' type faces. But to my knowledge he has never slavishly imitated the work of other designers. Fairfield and Primer, I believe, can always be specified where legibility, readability, and distinguished type design are vital."

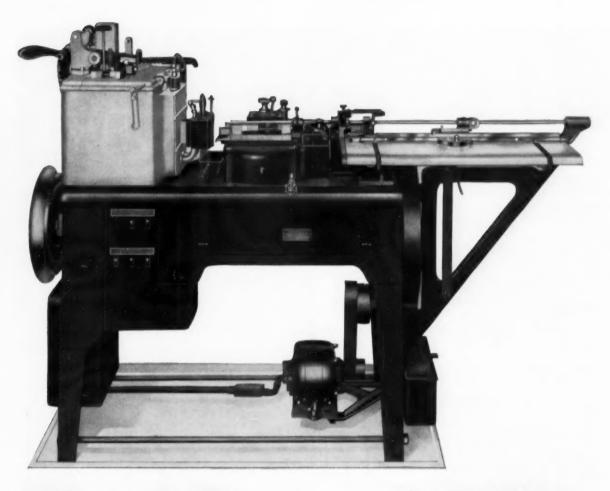
FRANK E. POWERS, Type Director, J. Walter Thompson Company

Mergenthaler Linotype Company, 29 Ryerson Street, Brooklyn 5, N. Y.



Agencies: Atlanta, Boston, Chicago, Cleveland, Dallos, Los Angeles, New York, San Francisco. In Canada: Canadian Linotype, Limited, Toronto, Ontario

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To meet exacting strip material requirements, production men depend on the Elrod to consistently deliver an abundance of quality material under all conditions.

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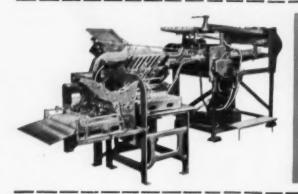
Sturdily built, the Elrod stands up under heavy duty production. In many printing plants it is the basic equipment for their strip material supply.

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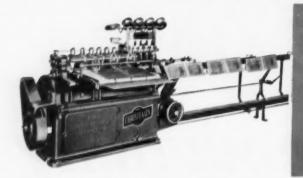
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FOLDING is the first step in achieving profits from pamphlets... and Cleveland Folders, available in a wide range of sizes, are the standard of the industry. Precision-built, of top quality materials and workmanship, every Cleveland is designed for many years of high-quality, high-speed production.



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DEXTER FOLDER COMPANY

General Sales Office

330 West 42nd Street New York 36, N. Y.

NOVEMBER 1956

No. 2

Vol. 138

The Inland Printer



THE LEADING PUBLICATION IN THE WORLD OF OFFSET-LETTERPRESS PRINTING

He Would Confuse Confucius!

Editor, The Inland Printer:

I enjoyed particularly your first editorial of the September issue and I have condensed your final quip to:

"Businessman so busy no time to read trade papers like man so busy chop wood no time sharpen ax."

And I'm going to set this abbreviated Confucious version in 18 pt. Bulmer Italic and drop it en our president's desk.

If I lose my job, it's simply all your fault! -William L. Robertson, Oreland, Pa.

Industry Short of Craftsmen

Editor, The Inland Printer:

I deeply appreciate the very fine article which appeared in your September issue concerning my election as president of the International Graphic Arts Education Association.

As you are fully aware, there is a shortage of skilled craftsmen in the printing industry—any publicity concerning the International Graphic Arts Education Association and the printing schools which you may publish is rendering a great service to the industry, and I deeply appreciate your keen interest.

-Charles E. Kennedy, President, International Graphic Arts Education Association, Nashville,

Compounding Ink Problems

Editor, The Inland Printer:

In your September issue, your Presssroom department editor, George M. Halpern, wrote an article that was intended to help pressmen over-

(Turn to page 4)

LEADING ARTICLES

Building a Lithographic Sales Force

-By Marshall L. Russell

Two Firms Merge, Build New Combination Plant

How to Use Water Color Inks for Screen

Process Printing—By Victor Strauss

How Permit Imprints Facilitate Mailings for Printers' Customers

Causes of Paper Pick—How to Measure It

—By Carolyn E. Moore

Small Printers Need Help in Solving Cost Problems—By Olive A. Ottaway

Front Cover design by LeRay Barfuss, Houston, Texas

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For contents of previous issues, consult the Industrial Arts Index in the library

Manuscripts

The Inland Printer will accord manuscripts, photographs, drawings, etc., courteous attention and normal care, but cannot be held responsible for unsellicited contributions. Contributors should keep duplicate copies of all material sent in. Address all contributions to The Inland Printer, 79 West Monroe Street, Chicago 3, Illinois.

Subscription Rates

Subscription Kates
For the United States: one year, \$5; two years, \$8; three years, \$10; single copy, 50 cents. For Canada: one year, \$5.50; two years, \$9; three years, \$11; single copy, 55 cents. (Canadian funds should be sent to The Inland Printer, Terminal A, P.O. Box 100, Terminal Pan-American: one year, \$6; two years, \$10; three years, \$15. Foreign: one year, \$10; three years, \$20. Make checks or meney orders (for foreign) payable to Maclean-Hunter Publishing Corporation. Foreign postage stamps not acceptable.

WAYNE V. HARSHA, Editor

JOSEPH J. O'NEILL, Manager

J. L. Frazier, Consulting Editor Robert J. Skup, Assistant Editor L. H. Allen, Eastern Editor Margot Cohn. Editorial Assistant

Cecil Hancock, Production Manager M. M. Gross, Circulation Manager Published at 79 West Monroe Street, Chicago 3, Illinois. Phone: RAndolph 6-2802

Eastern Advertising: William H. Thorn, 522 Fifth Ave., New York City 36. Phone: MU-2-7888 Midwest Advertising: Harry H. Yocherer, 79 West Monroe, Chicago 3. Phone: RA 6-2802 Pacific Advertising: Don Harway, 1709 W. 8th Street, Los Angeles 17, Calif. Phone: DU-2-8576 Great Britain: Maclean-Hunter, Limited, Wellington House, 125 Strand, London, W. C. 2

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Associated Business Papers



Audit Bureau of Circulations





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In installation after installation, users of Hamilton ad assembly cabinets report increased quantity of work quickly repays initial cost.

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Why not talk it over with your Hamilton dealer?



HAMILTON MANUFACTURING COMPANY . TWO RIVERS, WISCONSIN

LETTERS TO THE EDITOR

(Letters to the Editor began on page 3)

come conditions that arise from time to time in the pressroom.

Some of his remedies, like some of the old time doctors' remedies, apparently are worse than the disease, especially when administered by a person other than a specialist. While it is true some of this material has been found in ink rooms from time to time, it is also very true that more jobs have been spoiled by the addition of cup grease, vaseline, kerosene, talc, cornstarch, etc., than have been benefited.

We believe a specific product should be used for a specific condition WITHOUT experimenting.

We must consider the modern day pressman a professional and not try to sell him a "do-ityourself" box of tricks when scientifically correct materials are so readily available to him at a very low cost.

-E. R. Klemm, Jr., President, Central Compounding Company, Chicago.

More Articles for Small Printer

Editor, The Inland Printer:

In your August Newsletter, you said that 23.9 per cent of the printers had from 4 to 7 employees and 19.8 per cent had from 8 to 19 employees.

Why not key more articles to this 43.7 per cent, which includes us?

Will we ever get list prices in equipment advertising or new product announcements?

-W. J. McCabe, Times, Haverstraw, New York.

(Editor's note: Further, Mr. McCabe, more than 92 per cent of the printers have fewer than 50 employees. So it's mainly an industry of small business. Some time ago The Inland Printer recognized that most printers are small printers and that we should, accordingly, change our editorial policy. This we have done, and if you will examine our columns closely, you will see that more and more material is being directed to the small printers. We can't control manufacturers and their advertising copy. Let's hope they'll at least read your suggestion. We have an editorial policy of not listing prices in our new products department. Smacks too much of free advertising.)

Square Nails Make Round Holes?

Editor, The Inland Printer:

As a subscriber, I would like some help in answering a historical question.

Does any one know when type cases were last made with square nails? I got a full-size case lately with thick redwood bottom, and in reducing it to two-thirds size to fit my stand I found it had square nails. I wrote to Kelsey (founded 1872) but they referred me to Hamilton Mfg. Co. One of their men, 35 years in service, does not remember such. I suspect square nails date back to Mergenthaler days and hand-

-S. W. Tatnall, Tatnall Press, Fresno, Calif.

(Editor's note: You really must have an old case!
The public library informed us that the round
nail machine was invented in the 1700's. It's
pre-Mergenthaler but probably post-Gutenberg.
Maybe one of our readers will let us know.)

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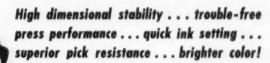
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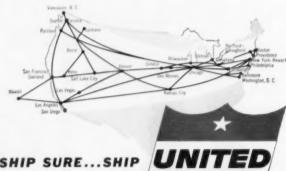
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LOS ANGELES to SEATTLE .	0	0						\$9.80
CHICAGO to LOS ANGELES .		0						\$17.75
PHILADELPHIA to PORTLAND								\$24.15

*These are the rates for printed matter. They are often lower for larger shipments. Rates shown are for information only, are subject to change, and do not include the 3% federal tax on domestic shipments.

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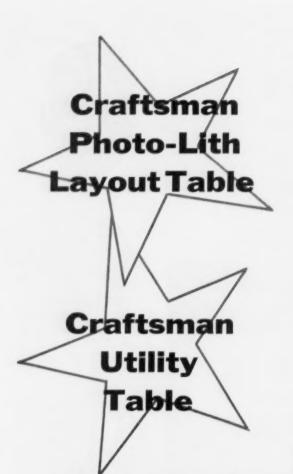




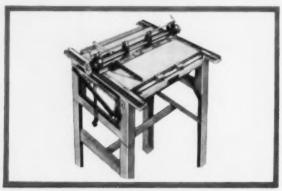




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. . . these star performers assure precision line-up and register at lowest costs

The Craftsman Photo-Lith Layout Table is for line-up, registering, negative and plate ruling, copy layout, masking and stripping, opaquing, and for checking up on work in process. It is a sure way to get precision accuracy, to speed up production, and to cut costs.

Specially designed and precision built, the Photo-Lith Layout Table is your key to best results at lowest costs. Features such as two straightedges operating on machine cut geared tracks, Vernier dials with calibrations as fine as 100ths, sheet stop guides and grippers, stainless steel scales, and special marking devices make it easy for operator to turn out the kind of work that will keep your customers happy. Tables available in five sizes, with working surface from 28" x 39" to 62" x 84".

The Craftsman Utility Table is a compact, low-priced table with a great many uses for the letterpress printer, lithographer, offset printer, label and carton printer, or photoengraver. Special patented straightedge, with detachable triangles, permits working at front or back of the table. Combination sliding grippers and sheet stops hold work down. The working surface is ¼" thick grained glass, 22½" x 28½". This is a practical table for all-around use in line-up and register.

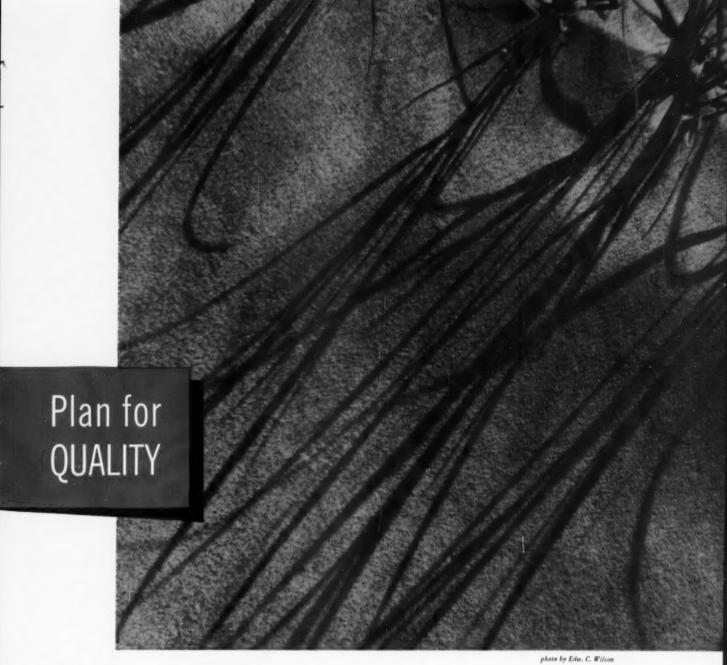
The design and features of Craftsman Tables are the result of over a quarter of a century of development. A Craftsman Table is a wise and profitable investment, for it will save you time and money . . . and it will help you produce work of greatest possible accuracy. Send for catalog giving complete information.



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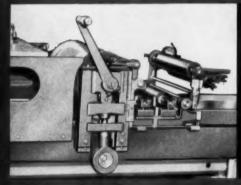
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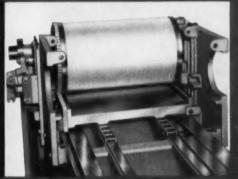
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AUTOMATIC GRIPPERS automatically grip the sheet as it comes into position. Auxiliary foot control allows operator to open grippers manually at any point for close register work or for faster release of small sheets.

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MICRO-REGISTER FRONT GUIDES provide for consistent feeding and accurate register requirements.

TIP-OUT ROLLERS assure fast, easy wash-ups. One pull of the handle tips the entire roller system separating all rollers as well as putting them into a convenient position for rollers to be washed without removing them from press.

BED GEAR RACK accurately cut from 3 inch solid steel, assures clean reproduction proofs.

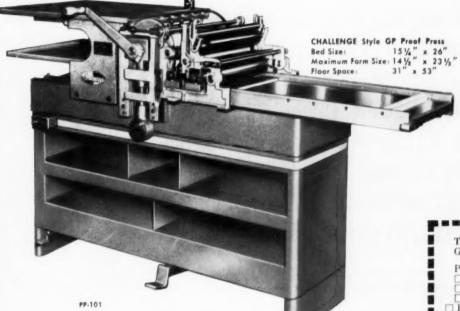
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The Challenge "Cylinder Press" system of revolving cylinder and reciprocating bed is the easy natural way to pull a good proof. The operator pulls all proofs standing in one position, without moving back and forth to complete the cycle.



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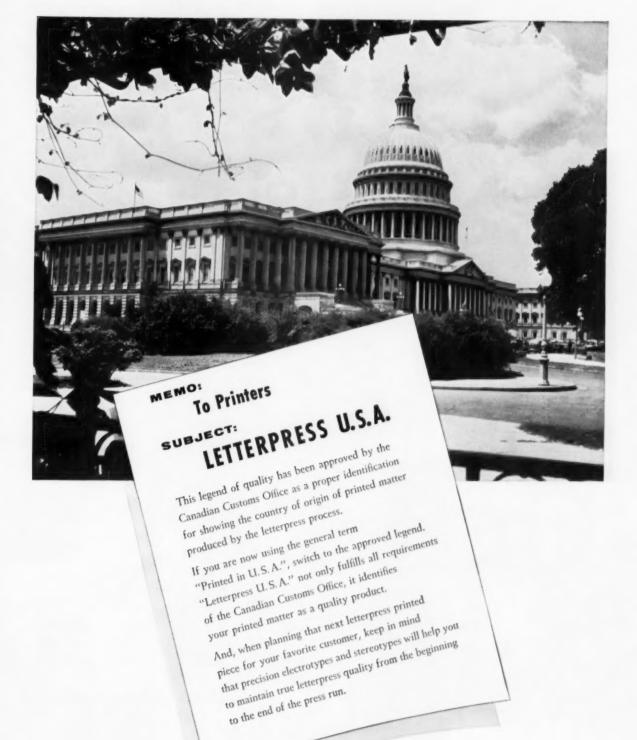
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Have your dealer repr	resentative call.
Have your dealer repr	esentative call.
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Christmas 1956

SWE honor the Nativity this Christmas, let us all give more thought to the spiritual meaning of this great day—remembering that through Christ, God revealed to us the lasting truths of Christian faith. I Again let us dedicate our lives to the service of our Heavenly Father. As we pray, let us give thanks to Him for our priceless heritage to worship and live as free people. Tet us remember to pray for those who bear the burden of tyranny, and for those who are ill and depressed, that they may soon be blessed with lighter hearts. Thet us pray for His guidance of our chosen leaders, that they may work wisely and unceasingly for amity among nations. I Let us, with thankful hearts, spread the age-old message of the Christmas angel, "Glory to God in the Highest, and on Earth, Peace to Men of Good Will." I I

INTERNATIONAL PAPER COMPANY

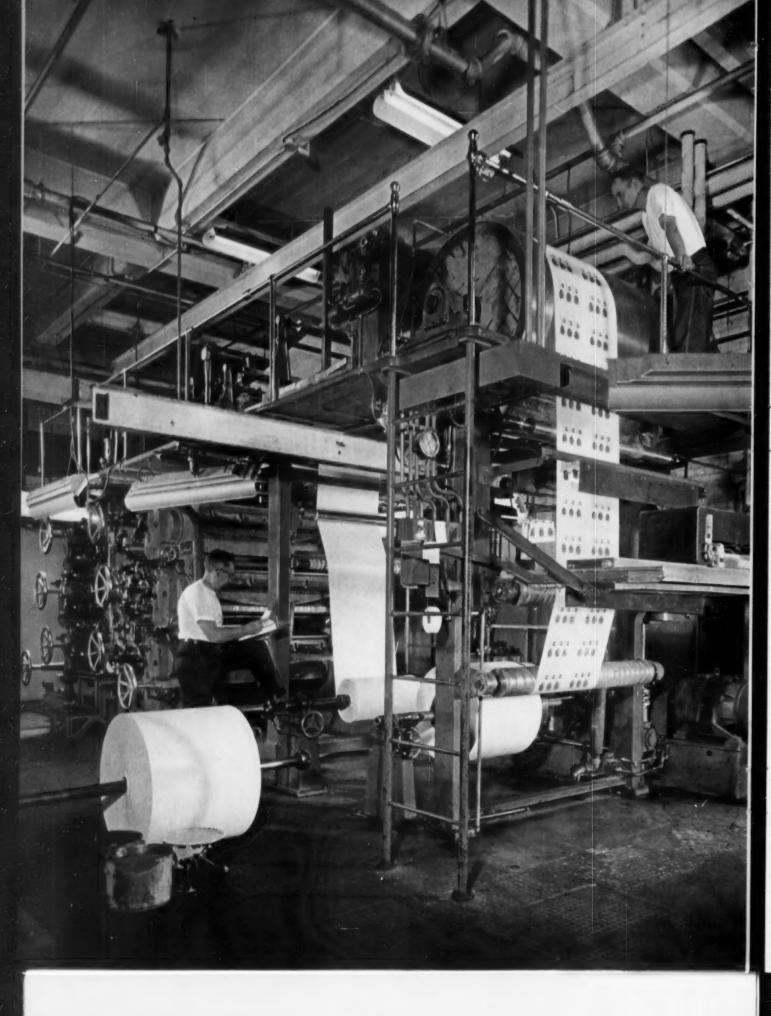




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Dept. I P 701 Leader Building, Cleveland 14, Ohio

(Printed Letterpress from Electrotypes)



This Cottrell prints wrappers by the mile

Today's rapidly growing packaging industry demands a printing press that will turn out work of higher quality, in dynamic color, and with a considerable increase in daily volume.

Cottrell's new roll-to-roll letterpress is such a press. It is setting new records for printing quality, production volume, and outstanding profits. It puts a beautifully inked, precisely registered image on highest quality food wrappers and labels.

And it does it at a web speed of 800 feet per minute. That's at the rate of nine miles of printing in just one hour of steady running. Or, looking at it another way, that's equivalent to 18,000 sheets of 32 x 52" stock per hour.

What's more, it does all this in six colors. It feeds paper evenly from a roll, passes the web around the single impression cylinder where all six plate cylinders can print it in meticulous register, takes it over a backwaxer if desired, then rewinds the printed web onto a roll, ready for further waxing or for shipment to the packager.

This new Cottrell multicolor web press for labels and wraps is available in many sizes in six- or eight-color models, and can be furnished with web rewind or other types of delivery.

Alert packaging printers and converters—like most leading magazine and commercial printers—are finding that Cottrells make quality printing more profitable. In fact, wherever printing is big business, you see Cottrell presses at work. For the full story, check with your Cottrell representative, or phone The Cottrell Company, Westerly, R. I.



HEART OF THE PRESS is Cottrell's compact printing unit, with all six of the plate cylinders clustered around a single impression cylinder. The inker stands roll back quickly for fast, convenient makeready from the floor.



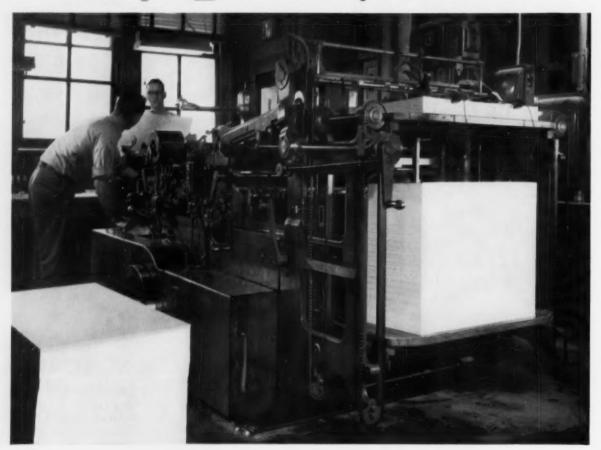
BACKWAXER puts film of paraffin on back of freshly printed web to prevent offsetting when web is rewound. Large chilling drum sets the wax. The film of wax is removed from back of paper in subsequent operation.

The Cottrell Company

. . . a subsidiary of Harris-Seybold Company

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THE MEAD CORPORATION

Papermakers to America

Sales Offices: Mead Papers, Inc., 118 West First Street, Dayton 2, Ohio New York • Chicago • Boston • Philadelphia • Atlanta

Wheelwright Bristols, Indexes and Blanks by Mead

- · Superfine Bristol
- . Olympic Bristol
- · Fiberfold Bristol
- · Strongheart Index
- · Made(w)right Index
- · Ionic Blanks

Ask your Mead-Wheelwright Merchant for samples of these papers

COLLECT SALES



with color by



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SCREEN PROCESS



GRAVURE PUBLICATION



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GRAVURE . FOIL



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Sinclair and Valentine Co.
PRINTING INKS FOR ALL PURPOSES

COLOR

COLLECTS SALES!

S&V gained the international stamp of approval for superb color! Such recognition is the result of years of skill, collecting and creating a rainbow of colorful inks to perform on every imaginable surface. This know-how is at your service—ready at all times to provide you with dynamic, sales-winning color. If it's a new printing concept, or the solution to an old problem, the accurate interpretation of your quality demands is the special concern of the color technicians at S&V. Why not put them to work for you, and make color by S&V an integral part of your planning? Start collecting sales now—with color by S&V!





Sinclair and Valentine Co.

OVER 35 BRANCHES PROVIDE SERVICE FROM COAST TO COAST

Main Office and Factory: 611 West 129th Street, N. Y. 27, N. Y.



this operator is cutting costs

. . . with a new LAWSON SERIES V-65 HYDRAULIC cushioned CLAMP CUTTER that cuts more and higher lifts with unsurpassed accuracy.

LAWSON CUTTERS CUT COSTS... by cutting all papers smoothly and accurately. The gentle, truly cushioned hydraulic clamp holds the lift of paper firmly without marring top sheets or disturbing the alignment of the stock. The straightline knife pull cuts 6½" lifts smoothly and with exceptional accuracy , .. not a "ripple" in the cut edge.

LAWSON CUTTERS CUT COSTS . . . by increasing productivity per man hour. Higher lifts, easier handling and greater speed set new production standards. Set-up time is reduced — all controls are located in front of the machine within easy reach of the operator. Rugged Mechanite iron construction and simplified design with gears in a sealed bath of oil make maintenance easy.

Use this coupon. Send for an informative, factfilled LAWSON CUTTER brochure, today.

E. P. LAWSON CO.

main office: 426 WEST 33rd ST., NEW YORK 1

CHICAGO: 628 SO. DEARBORN ST.

BOSTON: 176 FEDERAL ST. PHILADELPHIA: BOURSE BLDG.

features. The many safety features found only on LAWSON cutters give greater protection to the operator and the machine. Keeps insurance costs to a minimum.

LAWSON CUTTERS CUT COSTS... because they're as modern as tomorrow. Yet they are built with the skill and experience gained in more than half-century of cutting equipment specialization. Planned to grow with your needs, the standardization of design permits the addition of an Electronic Spacer for "automatic" cutting, right on your own floor.

If you are contemplating expansion of your cutting operations or replacing old-fashioned equipment, you owe it to your balance sheet to get the full story about the finest, most economical cutter you can own.



E. P. LAWSON COMPANY

426 WEST 33rd ST., NEW YORK 1, N. Y.

PLEASE SEND SERIES V-65 CUTTER BROCHURE TO:

PLEASE SEND SERIES 4-03 COTTER BROCK

NAME

COMPANY

ADDRESS

CITY STATE

What's label paper doing in a bathtub?

You might wonder. But a nationallyfamous, mid-western manufacturer of bathtubs doesn't. Label paper in his bath-tubs earns him thousands of additional sales.

During installation bath-tubs are subjected to some pretty rough treatment . . . Workmen throw tools in them, stand in them and, in general, abuse them.

This results in scratching or chipping of the extremely brittle porcelain on the tub. A McLaurin-Angier paper merchant heard of this problem. He went to the mid-western bath-tub manufacturer and suggested he line the tub with a protective paper.

We recommended a special printed label paper with a water soluble gumming. After the tub is installed, and ready for use, filling the tub with water "soaks off" the protective paper lining.

To date we've sold this mid-western manufacturer a lot of this M-J special label paper with water soluble gumming. He's sold a raft of bath-tubs because he offers builders the protection of the paper lining, with the simplicity of "soak off" removal.

The sign of the most complete label line! . . .



paper that answers your specific printing or packaging need.

You know, from experience, that a label is no better than the paper on which it's printed. McLaurin-Angier offers you over 100 years of experience gumming and coating paper plus the most complete line of label papers in the country.
Whatever your label problem in printing

or packaging, we welcome the challenge to meet it and solve it.

Remember a label is no better than the paper on which it's printed . . . specify M-J label paper and you start with the best!

Address inquiries to Brookfield Sales Office, Brookfield, Mass.

McLAURIN-ANGIER COMPANY HEADQUARTERS: Needham Heights 94, Mass. MILLS: Brookfield, Ware and Framingham, Mass; Homer, La. OFFICES: New York, Chicago, Cincinnati, Los Angeles



50 YEARS IN AMERICA ... 100 YEARS OF EXPERIENCE

M-J WARETONE

M-J Instantaneous & Delayed Action HEAT SEAL

M-J PLATEDS

M-J Self-Adhesive DRY-STIK

M-J OLD TAVERN

M-J Guaranteed FLAT GUMMED

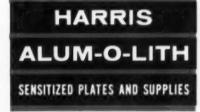
ONLY HARRIS ALUM-O-LITH SENSITIZED PLATES ARE MICRO-SURFACED!*

Some plates on the market are **SMOOTH**. Advantages: sharp tones, clean lines, excellent fidelity up to 300 line screen, little or no background scumming.

Some plates on the market are **GRAINED**. Advantages: wide latitude in ink and water control, no roller skid, clean running tones and reverses, long life.

But only HARRIS ALUM-O-LITH SENSITIZED PLATES ARE MICRO-SURFACED... not smooth, not grained but slightly etched to combine the advantages of both surfaces.







LITHOPLATE, INC.

A Subsidiary of Harris-Seybold Company

WESTERN. 278 Arden Drive, El Monte, Calif. EASTERN. 5308 Blanche Ave., Cleveland 22, Ohio BOUTH EASTERN. 523 W. Broad, Richmond, Va. MIDWESTERN. 3860 63rd Street, Chicago. III.









You get more with one of the "FIRST FOUR"

Cashing in on the dynamic growth of offset lithography, commercial, specialty and job press printers use more Harris presses than all other offset makes combined. The "first four" presses in the Harris line cover the popular sizes up to 23 x 30". Like all Harrises, they combine fast-on, fast-off versatility with high running speeds. Their precision register and sheet control produce more salable sheets of the finest print quality in the payoff pile.

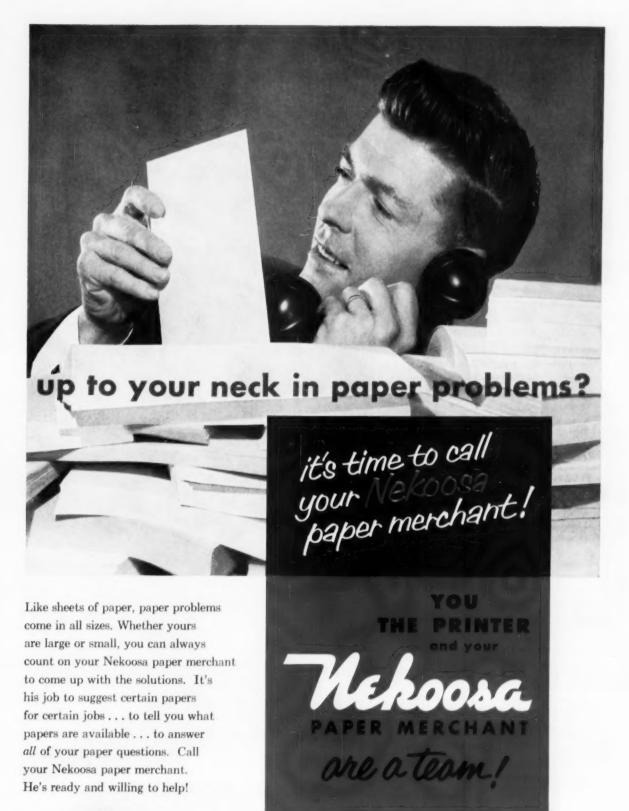
Rugged, soundly engineered Harris presses are the product of 50 years' experience in lithography. Backing their profitable operation year after year is the best-trained service organization in the Graphic Arts.

It will pay you to compare Harris offset with your present equipment before you expand your plant or replace less efficient units. Check your local Harris-Seybold sales representative for the facts today. Harris-Seybold Company, 4510 East 71st Street, Cleveland 5, Ohio.



HARRIS PRESSES

Cottrell Presses • Seybold Cutters • Macey Collators
Harris Chemicals • Harris Alum-O-Lith Supplies • Special Products





NEKOOSA PAPERS: Nekoosa Bond • Nekoosa Ledger • Nekoosa Duplicator • Nekoosa Mirneo • Nekoosa Manifold Nekoosa Offset • Nekoosa Opaque • Nekoosa Master-Lucent • and companion ARDOR Papers

Follow the Arrows to Lower-Cost Cutting with a

SIMONDS RED STREAK PAPER KNIFE!

There are many, many kinds of steel today BUT THIS IS THE ONE THAT'S BEST FOR CUTTING PAPER! We call it "S-301", you'll call it "excellent". It's from Simonds' own Steel Mill and is the result of constant research and testing. Combines maximum hardness with toughness to give you more cuts per grind.

Note the supersmooth mirror-like haish on the face side. It's an important factor in maintaining a razor-sharp cutting edge for the longer life of a Simonds Knife.

Concave Ground on the face side for maximum clearance, the knife cuts freely and easily without rubbing the stock—gives you cleaner, straighter cuts with less strain on knife and cutter.

For a longer-lasting cutting edge (and a minimum of resharpening) plus dependable performance always, follow the arrows to Simonds Paper Knives. Many standard sizes are available from stock.



Call your SIMONDS Industrial Supply



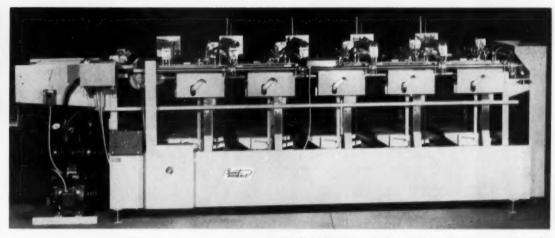
Factory Branches in Boston, Chicago, San Francisco and Partland, Oregon, Canadian Factory in Montreal, Que., Simonds Divisions: Simonds Steel Mill, Luckport, N. Y., Heller Tool Ca., Newcomerstown, Ohio, Simonds Abrasive Co., Phila, Pa., and Arvida, Que., Canada half of your profits away?

YOU ARE-IF YOU DON'T COLLATE

THE SPEED-KLECT WAY!



Model 31-1G 3-station also available



Model 51-1G Covered by Patent No. 2,568,224 and other patents pending.

That's absolutely right! The Speed-Klect Collator can actually cut gathering and tipping costs by as much as one half!

Speed-Klect automatically gathers and glues individual sections, single carbons between sections, and gathers and glues one-time, carbon-attached forms — much more economically and profitably! LET US SHOW YOU HOW! Send us a sample job; we will analyze it . . . run it at no cost to you.

Collecting collating problems is our specialty!



General Offices and Factory, 24 West 6th Ave., Emporia, Kansas Sales Offices in New York, Chicago, and St. Petersburg Sole Canadian Distributor — Sears Limited: Montreal, Toronto, Winnipeg, Calgary, Vancouver England: SOAG Machinery Co., London

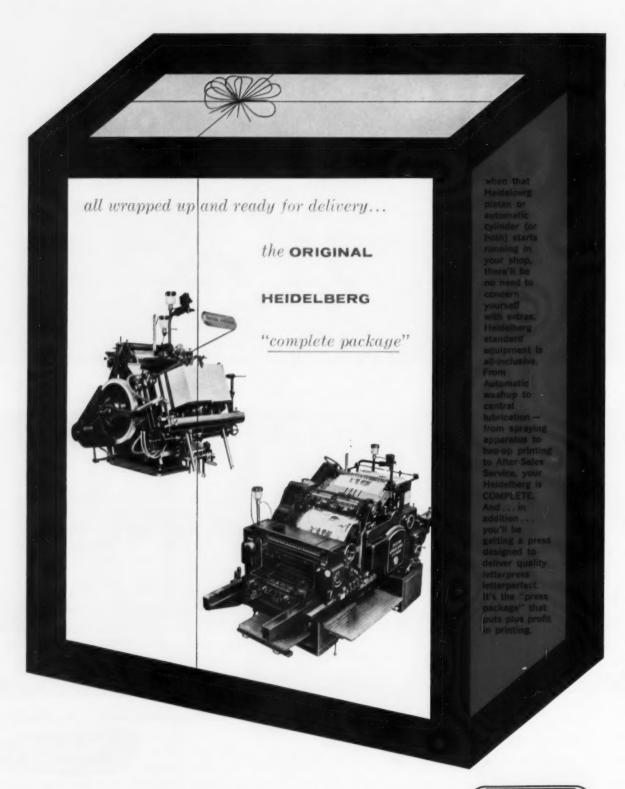
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over 70,000 Heidelbergs in use, world-wide! ORIGINAL HEIDELBERG

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YOURS

on request:

this informative book

to help you select

the right paper

for each of your

business records

Parsons

... makers of permanent prestige business papers



WRITE ON YOUR BUSINESS LETTERHEAD FOR BOOKLET 1F1: PARSONS PAPER CO., HOLYOKE, MASS. © PPCO 1956

A Friendly Invitation: You are cordially invited to become a charter member, during 1956, of

The Parsons King Cotton Club
... an exclusive group of men and women, who in the designing, producing or selling of fine printing, strive constantly to attain the high-quality craftsmanship on which the Graphic Arts Industry has been built.

Parsons Guide Book Helps Printers Sell Better Business Forms

These are the reasons why Form Printers stock and recommend Parsons cotton fiber record-keeping papers:

- A large variety of matching colors fit the needs of record-keeping color control systems.
- Parsons ledger and index papers offer a wide range for most form uses, sizes, or weights.
- "Solid" sheet formation (in any weight) will not dog-ear from frequent hard use.
- Parsons smooth, uniform "no glare" surface takes hand or machine posting perfectly and erases without roughening or discoloration.
- Cotton content sheets add longer life to important records... (Parsons Extra No. 1 100% grade is often specified for permanent records).
- Parsons cotton content papers run well on letterpress, offset or pen-ruling equipment.
- Accurate, efficient record-keeping is improved by quality form printing on high grade cotton content papers.

- Recommending Parsons papers adds prestige to a quality printer's reputation.
- Service on all Parsons papers is fast — shipment from paper merchants' stocks or mill stocks on same day your order is received, eliminates delivery problems.
- Parsons Guide Book for Recordkeeping Papers helps printers and users get the right paper for the right record . . . making better business for both.*

These are the famous Parsons Cotton Fiber Record-Keeping Papers:

Cotton Content Parsons Ledgers 100% Extra No. 1 Scotch Linen Ledger

 100% Extra No. 1
 Scotch Linen Ledger

 100%
 Parsons Linen Ledger

 75%
 Defendum Ledger

 50%
 Mechano Form Ledger

 25%
 Crest Ledger

Parsons Indexes

Parsons Index

{ Mechano Form Index
 Arkon Index
 Crest Index

Parsons is preferred by your customers

When you recommend a Parsons Paper, it makes sense to your customer. He has been pre-sold by Parsons advertisements stressing prestige, performance and permanence. In 1936, Parsons advertising will appear in 12 magazines, including Business Week, The Office, Office Executive, Office Management, Journal of Accountancy and Fortune. To cash in on this advertising, it will pay you to stock and recommend Parsons bonds, writings, ledgers and indexes.

100%

50%

25%



k	Mail to Parsons Paper Company • Holyoke • Massachusetts
	Gentlemen:
	Please send your guide book: How to get what you need in record-keeping papers and index cards.
	☐ I would like to become a charter member of The Parsons King Cotton Club.
	YOUR NAME
	COMPANY
	ADDRESS
	STATE YOUR POSITION

The Coturday Evening

THE SATURDAY SYEWING POST

But the new

gry and my

of all heart deaths is still unknown. "We have an enormous opportunity here," he aud. "We can bring together all the medical disciplines—from cherinist studying substances in the circulation of plants to surgeons who must operate on a particular patient at this particular time.

Well-chosen patients. Doctor Terry declared, offer an invaluable proving ground for research. One such "assistant researcher" was Wilmith C. Weaver, a retired maintain from Baltimore, Maryland, who soffers from a rheutmatic heart.

I was introduced to Mr. Weaver by

American Business Leaders use WARREN'S STANDARD PRINTING PAPERS to improve profits and human relations



How to score a bull's-eye

Because good printing is so vital to the success of modern business, we recommend that you read every word of S. D. WARREN COMPANY'S November message to business management.

You'll find this message in The Saturday Evening Post for November 10, Business Week for November 10 and U. S. News & World Report for November 9. It aims to bring you a greater volume of good business and to help you score a

S. D. Warren Company, 89 Broad St., Boston I, Massachusetts.

BETTER PAPER - BETTER PRINTING



Printing Papers

for Letterpress Printing, Lithography, Book Publishing, Magazine Publishing, Converting.

of pick-to close ow I'm a

she was ten years old, man, a beyele. Neither drugs nor specialists could present her seizures, which often occurred two or three times a day. Duroung the past four months Mass Kahle has been examined repeatedly by the neurologists of NHI. the newest drugs have been gists of NHI the newest drugs have been tried on her without effect; surgery remained as the only useful procedure. Doctor Headley and his colleagues carefully explained the surgicul process: she would roceive local arresthesia, but remain conscious through the operation, which he surgeons explored to respond while the surgeons explored her brain with gentle electrical charges.

What are you aiming for in your business?

If you are aiming to stay in h long time, set your sights high. Not only does a record pa-growth loam ahead (U.S.A. in

mated 18.5% over 1055 sales opportunity as well can gain competitive a capitalize on the c niques now availal

Successful Tech

You can outrus year by persuadir percent of the popuct is superior. On the facts about a clusive features, Transmit these istandable style, collectors and illustration and readable form: in r PRINTED selling

distinguished record or available to you now and booklets, brochures, broat behalf.

annuals.

Well-printed pieces seil whites sleep, are not handicapped by distants stay on the job as ready-reference works. They keep the record straight, help quash rumors and misunderstandings. They can convey the spirit of your organization, and thereby do a good public relations job for you, too, Properly prepared

Your Ally -A Good Printer

What's the first step toward effective printed pieces? Just this: call in a good printer before your plans are set. Early contact cannot be overemphasized. Only when he is invited as an active member of the creative team from the beginning can a good printer contribute fully from his fund of experience. Only then can he bring all his talents into play on your

You can expect your printer to specif 's Standard Printing Papers to produce prin

DIANDARD

Printing Papers



Some of the forms of literature, printed on WARREN'S STANDARD PRINTING PAPERS, that are aiding Industry

Why Miller Company puts TIMKEN® bearings on all press cylinders of new offset press

THE Miller Printing Machinery Company specifies Timken[®] tapered roller bearings for all cylinders of its Miller E. B. CO 22" x 34" offset press. This decision is based on the Miller Company's past experience. They know first-hand how Timken bearings minimize friction and wear, maintain precision. Here's why:

Timken bearings maintain permanentalignment. The tapered construction of Timken bearings lets them take radial and thrust loads in any combination. Cylinders stay aligned.

Wear and maintenance are reduced.

Timken bearings practically eliminate friction, save power. That's because they're geometrically designed to give true rolling motion and precision manufactured to live up to their design.

Timken bearings cut lubrication costs. They hold housings and shafts concentric, making closures more effective. Lubricant stays in; dirt stays out.

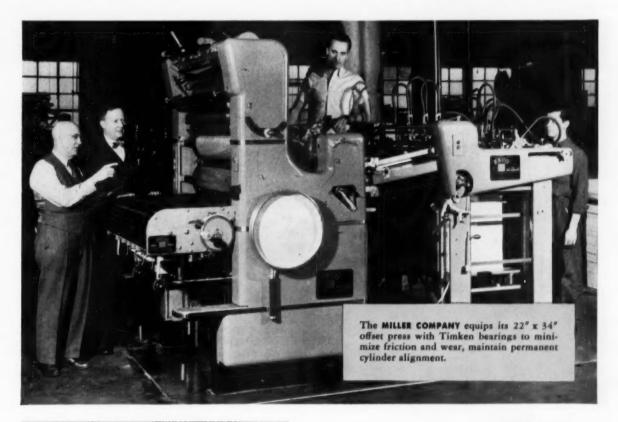
And Timken bearings normally last the life of the press. One big

reason: they're made of steel so fine we have to make it ourselves to get it. No other American bearing manufacturer takes this extra quality step.

Specify Timken bearings for all the equipment you build or buy. Look for the trade-mark "Timken" on every bearing. The Timken Roller Bearing Company, Canton 6, Ohio. Canadian plant: St. Thomas, Ontario. Cable address: "TIMROSCO".



This symbol on a product means its bearings are the best.



PROFILORAPH TRACE GOOD COMMERCIALLY

PROFILOGRAPH TRACE, TIMEEN BEARING TIMISH (5,000 & VERTICAL 30 & HORIZONTA)

OFFICAL FLAT, PERFECT FIRISH

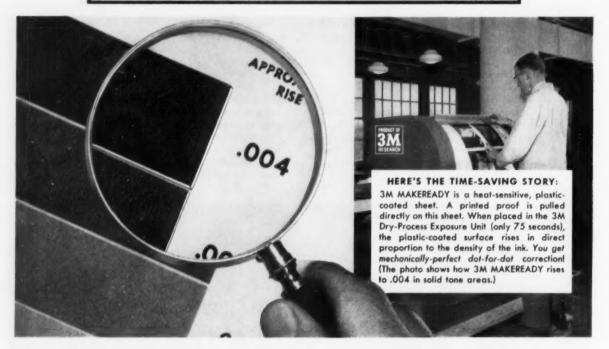
SMOOTH TO MILLIONTHS OF AN INCH

Surface finish of high quality Timken bearing rollers and races is so smooth that it takes a profilograph to measure its smoothness. This instrument measures surface variations to a millionth of an inch, as shown at the left.





At Last... precision overlays without the time and error of "hand cutting" methods!



MW 3M Makeready Saves Hours of Production Time...and Paves the Way to Quality with Economy

You've heard it said many times by experts: "3M MAKEREADY is the most forward step in letterpress printing in the last two generations." Its mechanics are simple . . . the advantages many. For the first time, something has been done to sharply reduce the costly, but highly unproductive area of printing—that of makeready.

Before 3M MAKEREADY, preparing precision overlays for fine halftone work took from one to six hours . . . often longer. Even then, the extremely accurate justification

necessary for absolute clarity and brilliant highlights was extremely difficult to achieve. But now, with 3M MAKEREADY, dot-for-dot tonal overlays and complete uniformity is assured. You can count on superior quality color and black and white work . . . at a real savings in production time.

A descriptive folder, outlining the many advantages of 3M MAKEREADY, including sample sheets, is free to you, by writing: Minnesota Mining and Manufacturing Co., Dept. KE-116, St. Paul 6, Minnesota.

3M MAKEREADY "3A" Is a registered trademark of Minnesota Mining and Manufacturing Company, St. Paul 6, Minnesota General Exports 99 Park Avenue, New York 16, N. Y. In Canadas P.O. Box 757, London, Onfario.

YOU CAN'T COMPETE WITH A HAMILTON PRESS

EXCEPT WITH A HAMILTON PRESS!"

"Practically Uninterrupted Production" o

"We schedule continuous production in

- Reports a Hamilton Tool customer of long-standing. He continues,

our printing plant but can approach

this only with our Hamilton Presses."

showing rubber plates in place by carrier-sheet method.

These are the important underlying reasons: —

Pre-mounting and proof

make-ready. Adjustable for all sizes ranging from 17" through 28" circumferences.

machine for plate

- Lowest Set-up and Make-ready time.
 - (a) Pre-mounting and pre-proofing of rubber plates before installation in press.
 - (b) Quick-fastening methods for plates sheets, and blankets.
 - (c) Rapid adjustment of patented paper "infeed" governor.
 - (d) Rapid, independent "cross" and "length" registration.
 - (e) Automatic uniformity of web tension.
- Lowest Upkeep Time and Expense.
 - (a) Precision engineering of "fits and limits"; construction by skilled Hamilton toolmakers.
 - (b) Primary bearings of self-lubricated type and secondary self-lubricating bushings.
 - (c) Dynamic balance of principal revolving parts.
 - (d) Rugged housings and bases.
 - (e) Convenient access to press parts.

Rubber-plate business forms printing press.

Communicate with our sales-engineers — learn what "Practically Uninterrupted Production" with a Hamilton Press can mean to you in profit dollars.

"LEADERSHIP THROUGH

The HAMILTON TOOL COMPANY PIONEER RESEARCH'



HANOVER ST., HAMILTON, OHIO

THIS AD

alerting
businessmen
to the fact that
Chieftain Bond
is the
largest selling
50% rag bond
in America

appeared in
Nation's Business
Dun's Review and
Modern Industry
Advertising Requirements
The Reporter
Insurance Salesman
Rough Notes

Want to get more
Letterhead jobs?
Then ask your
Neenah paper
salesman for free
copies of "The
Right Letterhead
for You."

neenah

modestly asks



why is

chieftain bond

the most popular 50% rag bond in America?

Because people like everything about it. Ask your printer for samples of America's largest selling 50% rag bond — Chieftain Bond.



Want help in recognizing the right letterhead for your company? Then ask your printer for a free copy of "The Right Letterhead for You."



neenah paper company

neenah, wisconsin



Fast Register

Registering-in on the Miller-M.A.N. Offset Press is fast and simple, since the plates may be shifted on the cylinder both sidewise and circumferentially without being unlocked. On second and subsequent units, the plate may be shifted on the cylinder, and an additional control permits the shifting of the entire cylinder both sidewise and circumferentially.

Write for complete information on this and other time and money-saving features of the Miller-M.A.N. Offset Presses.



MILLER PRINTING MACHINERY CO.

1115 Reedsdale St., Pittsburgh 33, Pa.

MILLER PRINTING MACHINERY CO. OF CANADA LIMITED 730 Bay St., Toronto 2, Ontario





The big difference is

No doubt about it, there's always a big difference when you call Railway Express to ship your printed advertising matter. Just look at these Railway Express features:

- SPECIAL LOW RATES that apply on printed material.
- VALUATION COVERAGE without extra charge (\$50.00 on shipments up to 100 lbs.; 50¢ a lb. above that weight).
- FAST, EFFICIENT DELIVERY, based on years of experience in speedy, dependable shipping "know-how."
- NATIONWIDE SERVICE, reaching some 23,000 communities in the United States.

No matter where you are sending or receiving printed material, you too will find that Railway Express does make the big difference in speed, economy, and safe, sure delivery. For more information on rates and service, get in touch with your Railway Express Agent. Remember—he's just a phone call away.



... safe, swift, sure



HAMMERMILL UNLOCKS THE SECRETS OF HARDWOOD

. . . exclusive Neutracel pulp makes Hammermill Bond better than ever

Modern printing presses and new office equipment have created the need for improved paper qualities, best obtained from a blend of pulps. To meet this need, the fine paper industry has made countless attempts to unlock the special papermaking qualities that nature grows in northern hardwoods. Now Hammermill has found the key, in the exclusive process that produces Neutracel ® pulp.

Neutracel pulp imparts a clearer, more attractive formation, a smoother, more velvety surface to Hammermill Bond and other Hammermill papers. And, Neutracel lends increased visual and printing opacity to minimize "show-through", plus greater bulk to make business letters more impressive.

Last year, installation of the Hammermill-invented centricleaners gave Hammermill Bond new, outstanding cleanliness. Now, with Neutracel, Hammermill takes a \$6,000,000 step forward to bring you Hammermill papers that 1) print better; 2) type better; 3) look better. Hammermill Paper Company, Erie 6, Pennsylvania.

HAMMERMILL

with Neutracel's finer fibers, costs no more

GOLD

SEPIA



GREEN



HOME

BUILDERS

BLUE



GREY





WHY HAMMERMILL COVER GETS READERS INSIDE



For covers that really beckon to the reader, choose Hammermill Cover. Hammermill Cover now contains Neutracel* pulp—an exclusive Hammermill development that brings the best qualities of hardwoods to fine papers.

Hammermill Cover with Neutracel has greater bulk to give it that important "feel" that says "QUALITY." And the more level surface obtained with Neutracel gives extra sparkle to illustrations, solids, type—whatever you print—letterpress or offset.

Strong, virgin fibers enable Hammermill Cover to take beautiful embossing to make your covers extra glamorous. You have your choice of 8 attractive colors and standard white shown at left. And there's a fluorescent bright white available at slight extra cost for special effects printing.

Remember, for a cover job, there's no paper like a good cover paper.

WAMMERMILL COVER

Manufactured by
HAMMERMILL PAPER COMPANY, ERIE, PENNSYLVANIA

Lithographed on Hammermill Cover, Substance 50, Antique finish



NEWSLETTER

UP-TO-DATE BUSINESS NEWS OF INTEREST TO MANAGEMENT IN THE PRINTING AND ALLIED INDUSTRIES

Printing Business Good; War Scares Breed Caution

Your printing business will probably continue good no matter how election worked out. Momentum of economy is high, will carry for long time. Much planning ahead. War scares cause some to be cautious. Best guessers see no World War III. Many local and regional actions but UN (and international police force) will strive to contain them, prevent them from spreading. If situation gets worse, special session of Congress may be called...in which case stand-by economic controls will be asked. Don't get alarmed YET.

Dun & Bradstreet Sees Continued High Levels

As key to your own business, Dun & Bradstreet quarterly survey of Business Men's Expectation indicates continued high levels of net sales, net profits and employment, with higher selling prices for first quarter of 1957.

Cut Capital Gains Tax? Increase Postal Rates?

Some things affecting your year-end business decisions: Congress probably won't cut capital gains tax...another try at raising postal rates, no matter who Postmaster General turns out to be, but there'll be lots of stalling until later in 1957 at least...corporate profits being squeezed despite bigger sales...businesses hard up for capital for expansions, etc. Confidence in business outlook still high in spite of tight money.

Fringe Benefits Average \$819 for Each Employee

What fringe benefits do your employees have? New book, "Fringe Benefits-1955," guide to realistic measurement of labor costs of doing business, available at \$1 per copy from Economic Research Dept., Chamber of Commerce of U.S., Washington 6, D.C. Gives facts about payments made last year by 1,000 business firms. Average: \$819 per employee. Five major types of fringe benefits in 20 industry groups analyzed with trends and variations indicated.

Starts Campaign to End Printing Process Feuds

New campaign to end squabbles among printing processes...

W. Floyd Maxwell, exec. director, Lithographers National
Assn., appeals to printing industry to conduct positive
public relations program aimed at promoting use of printed
media, regardless of process. Full details in Dec. IP.

(Over)

NEWSLETTER

(Continued)

Reuel Harmon Heads PIA; 1957 Meeting in Chicago New president of Printing Industry of America is Reuel D. Harmon, Webb Publishing Co., Minneapolis. Col. Harold R. Kibler, W. F. Hall Printing Co., Chicago, new vice-president. C. E. Schatvet, Guide-Kalkhoff-Burr, NYC, new secretary. John C. Henley III, Birmingham Publ. Co., new treasurer. Elected at PIA convention in Los Angeles Oct. 29-Nov. 2. Convention report in Dec. IP. 1957 meeting in Chicago.

Advance Census Report
On Printing Available

<u>Latest dope on commercial printing</u>, lithographing, greeting cards, bookbinding and related industries now available as <u>advance report of 1954 Census of Manufacturers</u>. 10c from Bureau of Census, Washington 25, D.C.

ATF Names W. W. Fisher; Succeeds Late M. J. Goger New American Type Founders president succeeding late Milton J. Goger (see p. 93) is Wm. W. Fisher, 44, youngest man to hold that post. Joined ATF in 1951 as v-p in charge of manufacturing, became v-p of operations, March this year named a director and v-p for sales. Details in Dec. IP.

Exposition-Conference Slated for Milwaukee 70th anniversary exposition and conference being staged Dec. 13-15 in Milwaukee by Graphic Arts Assn. of Wisconsin. Manufacturers will exhibit equipment and supplies...will have 75-100 booths. Events include management conference, clinics on letterpress and lithography.

NPIRI Starts 11th Year

National Printing Ink Research Institute marks 10th year of operation with conference at Lehigh University relating to manufacture and use of printing ink. See pages 52-53.

GPO's Ray Blattenberger Saves \$2-Million More U.S. Public Printer Raymond Blattenberger has done it again. He's given \$2-million back to U.S. Treasury... his fourth refund of GPO capital made possible by savings in operations since he became PP three years ago. Total now stands at \$13-million. Details in Dec. IP.

R. & E. Council Issues
Research Proceedings

Proceedings of Research and Engineering Council of Graphic Arts Industry sixth annual meeting last May in Chicago just out in 172-page book form. Reports deal with printability, maintenance, research progress, cold composition, letter-press plates, air conditioning, and more effective use of human resources. \$10 each from Council's managing director Robert E. Rossell, 5728 Connecticut Ave. NW, Washington 15.

Here Are Some Suggestions for

Building a Lithographic Sales Force

- Effective and money-making sales operations should be well organized and well planned
- This offset lithographic system, with slight alterations, will fit letterpress operations
- · All sales elements are covered: from forecasting and analysis to compensation and control

★ I'd like to tell you how we prepare, and then control our selling program at the Spaulding-Moss Company. The areas of forecasting, analysis, compensation and controls have been selected. This is probably more than I should attempt to cover, since actually each is a subject in itself.

What you read will not necessarily custom-fit your operation. I'm sure you are aware of this. I can only hope that you will realize the many benefits that can be yours from a well organized and well planned sales program, and will give it the same careful consideration you give production problems.

Competition is stronger and will no doubt increase in the period ahead. A thorough look at your sales organization will serve you well.

To start any operation you must have a plan! This is true just as much in sales as it is in production. We call our plan the "Forecast."

Lot of Work, Lot of Study

Now in order to set your Forecast, you must be resigned to the fact that it's going to take a lot of work and a lot of study.

Before I get into the matter of how to do it, why not just ask ourselves, "Why do it?" Here are some of the reasons:

- We are actually planning our sales for a year ahead.
- 2. It allows management to plan expense budgets.
- 3. It allows management to plan for equipment requirements.
- Personnel requirements can be projected.
- We end up with a budgeted profit and loss that is realistic and agreeable to management.

In short, we know where we are going and the responsibilities of all departments are fixed.

Although compiled by the sales department, the Forecast is not set by the sales department alone, but through a meeting of minds.

By Marshall L. Russell

Sales Manager of Printing Division The Spaulding-Moss Company, Boston

Marshall L. Russell became associated with the Spaulding-Moss Company in Boston in 1935 about the time he graduated from Newton High

School. He attended evening classes at Bentley School of Accounting and Finance in Boston and became exposed to selling while doing so. He left Spaulding-Moss in 1939 and gained additional sales experience during the next five years; he returned in 1944. He has had



extensive inside experience, supervising and coordinating order writing and estimating with sales. He was made sales manager of the printing and reproduction division in January, 1953. He is a member of the Sales Managers Club of Boston, the National Sales Executives Council, and is secretary-treasurer of the Blueprint and Photocopy Association of Boston. Mr. Russell presented the material incorporated in this article before the September convention of the National Association of Photo-Lithographers in New York. liminary meeting held. In attendance are our president, executive vice-president, works manager, controller, and the sales manager. There is a general discussion of problems and plans related to both sales and production. Talk usually centers on plans for expansion: people, new services, markets, costs, and such. Except for the controller, they all are members of our research and development committee, a fact which helps greatly in crystallizing our plans.

Find Realistic Sales Volume

We try to find a sales volume that seems realistic to both sides. Then starts the work of actually proving this volume to make it realistic. This is where the sales department goes to work.

Here are the steps we take:

1. We "see the people." It is the responsibility of the sales manager to talk with large volume and house accounts. We get information on their plans and possible volume for the coming year. You'd be surprised how valuable these discussions can be. They give you answers and cement customer relationships.

We talk with our salesmen. Individually, we go over territories account by account, trying to analyze the potential

The steady growth of printing and reproduction services of Spaulding-Moss Company has led to firm's location in this large building in Boston

Taking part are members of top management, accounting, and production. It may well be that your initial forecast is wrong. Production may not be able to handle the volume; top management may look at the budgeted P & L and decide it's not enough to produce the profit it wants, or it may be wrong for some other important reason. Discussion of the facts will point this out and it can be reset.

We have already started on our Forecast for 1957. First of all, there is a pre-



FORECAST-1956 Territory Offset Blueprint & Photostat Xerox forecast Ferecast **FORECAST** TYPE OF WORK INDUSTRY 42 Franklin Adv. Agency Group Art, Craft, Camera Camp, Resort, Amusi Civ. Eng., Architect Eng. & Design Financia Advertising Books Catalogs Blue Prints Ozaprints Photostat Sundries Miscellanes Xerox Poil Books School Annuals Forms 11. 13. 17. Financial Federal Government Special Graph Papers Park Square State Government City, Town, Country Insurance Statements 18 **Blue Prints** Legal Manufacturers Ozaprints Photostat Plano Merchandise Warehou Merchandise Store Blue Print Paper & Am Oxalid Sensitized Pape Ozalid Machines Ozalid Parts Ozalid Service Organizations Printers TOTAL Resale (Discount Only) Utilities (Ex. Tel.) Retail Store Individuals TOTAL Defense Average Month

Form 2

Form 1

sales team.

for the coming year. Year-to-date sales are available to us for examination. Present activity is reviewed and plans for the future are set. An understanding is reached in the matter of increased business necessary to attain our goal. We bring our salesmen in on things like this. We learn a great deal and at the same

3. We study our sales analysis for geographical growth areas and increased volume from any type of industry. Should we notice something of this sort, it is investigated and may or may not become a

time inspire them to greater action on the

part of our Forecast consideration.

4. We try to evaluate business and industry trends. This is done by reading business and trade publications, personal associations, and active club and association memberships. As soon as our Forecast has been agreed upon, it is put into form and copies are distributed to all concerned. The deadline for completion of the Forecast is Nov. 1.

We will take a look at these forms now and later those for analysis, compensation and controls.

Form 1 is a summary of our entire company Forecast. We have other divisions as well as a branch office in the Park Square Area of Boston. Two new branches have been opened this year in Rhode Island and Connecticut and will be included separately in the 1957 Forecast picture.

We show probable sales for the present year, the Forecast for the present year and our new Forecast for next year. Form 2 contains a breakdown of the lithographic sales Forecast by industry.

Form 3 shows a breakdown by types of work. Both of these tie in with our sales analysis.

Form 3

Form 4 shows a breakdown by sales territories, plus a separate figure for the New England Telephone and Telegraph Co. with whom we work under a contract. Since our lithographic salesmen also sell the service of our reproduction and Xerox departments, these figures are shown separately. Naturally, we all like to know how we're doing in actual sales versus the Forecast, so there are reports to tell us.

Form 5 is prepared quarterly and given to the salesmen with their monthly figures. It indicates their individual Forecast figures versus their actual sales to date. The preparation and composition department

Form 6

DATE:			
Working De	ys to Date:		
Monthly To	al Working Day	\$1	
	1954	1955	Month
Sales:	Av. Month	Av. Month	To Date
42 B.P. & P.	hoto		
Xerox			
Park Square			
Plano-Lithe	,		
Plano-Sma	Il Order		
Retail Store			
Mdse. Ware	house		
Thermo-Fax			
Sesn. Paper			
Mach. Servi	ce & Sales		
Total	1:		

figures at the bottom are not broken down in the main Forecast but simply put in here for sales emphasis on this operation to the salesmen. Copies are also distributed to those members of top management who are concerned with individual performance. To satisfy management in terest in the progress of our sales program, the accounting department prepares two reports.

Form 4

Form 6 is issued weekly and makes comparisons with two previous years on average monthly figures. The rate of billing during the month is reasonably stable, thereby allowing a fairly good check on volume as the month progresses.

Form 7 shows monthly and year to date Forecast figures as compared with the actual.

About five years ago, we instituted a system of sales analysis and find its value increases regularly as we apply it to questions of expansion, new equipment, specialized sales effort, advertising, etc.

It presents a pretty complete and reasonably accurate picture of our volume, broken down by industry, types of work, geographical area and classification.

Analysis From I.B.M. Cards

When a job is invoiced, the biller simply codes the work ticket with four letters representing these breakdowns. This information is then recorded by the accounting department on a multipurpose I.B.M. card. The whole analysis is easily drawn off for us quarterly.

If your business is of a general commercial nature and not specialized, we

Form 5

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PLANO	1			L .	1	1	-	1	l.	1	1	1	-
Service Services	1 1		1	T	1					1	1	1	
Securi /Second	-	-	-	1	1		-	-	1	1	1	1	
Artest					1			1		1	1	1	-
1%				1							1	1	
KEROK			0	0	0								
Service Factory			1	1									
Amount Familier Personal						-					1		
Miles?			1										
8													
BLUE A	PINT		-										
Armen Freitzer Brauert													
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Between										1			
16													
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defeat.												_	
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Form 7

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	Forecast	Actual	Percent	Artes)	Propenses.	distrib.	Funnaget	Serves
Blue Strict			1					
torus			1	1.				
Photoglat			1	1				
Pert Speet	1		1	1	1		1	
Plengraph			1	-				
Marringer					1			
Distre			1		1			
Scorttined Paper			1	1				
Markist Derries			1					
Pictal								
	1		ulz T	T		to	est T	
Blue Fried	-		+	+	1	_	-	-
			1		1	-	1	1
Photostat		_	-	-		-		1
Pertuates Pert Square			-					
Portuntat Park Square Flamprap								
Photostat Park Square Flamgraph Sprotouse								
Plantestas Park Square Plantgraph Square Store								
Photosidi Park Square Flangraph Marchines Store Sones Cond Pager								
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Quarter					
IBM Code	INDUSTRY	QUARTERLY	SALES TO DATE	YEARLY	QUOT TO DA
A	Adv. Agency Group				
8	Art,Craft,Camera				
C	Camp, Resort, Amusement				
D	Civ Eng Architect				
E	Eng & Design				
P	Financial				
6	Federal Government				
н	State Government				
1	City, Town County				
1	Legal				
К	Manufacturers				
L	Organizations				
М	Printers				
N	Resale (Discount Only)				
0	Unlines (Ex Tel.)				
p	Publishers				
Q	Retail Stores				
R	Telephone Contract				
5	Schools				
T	Individuals				
U	Defense				

Quarter	r				
18M Code	TYPE OF SALE	QUARTERLY QUOTA	SALES TO DATE	YEARLY	QUOTA TO DATE
A	Advertising				
10	Books				
c	Catalogs				
D	Pull Books				
E	School Annuals				
F	Forms				
G	Special Graph Paper				
н	Maps				
I	Insurance Statements				
3	Negatives				
K	Reports				

Form 8

believe it would be most helpful to you. Should you not have machine accounting, it can be taken care of manually on a spot check basis with fairly good results.

Although we probably have not utilized the analysis completely, here are some of the ways we have been helped:

1. Indicates volume from specific areas. Valuable in changing or adjusting sales territories.

2. Helps show effectiveness of advertising campaigns directed to certain categories in the industry breakdown.

3. Has pointed up potentials by significant volume changes.

4. We have been able to keep watch on our competitive strength in various geographical areas. Greatly aids sales effort and direction.

5. Tells us of changes in the nature of our work. Has been used effectively in equipment consideration, advertising emphasis and sales campaigns.

6. Of immense value in preparing the yearly sales Forecast as mentioned before. Now a brief look at the forms:

Form 8-Breakdown by industry. The initials are for coding, then the industry, which, incidentally, is almost identical to the breakdown of our mailing list stencils in the advertising department. The remaining columns show quotas set at time of Forecasting, sales to date and percentage of quota to date.

Form 9

Form 9-Breakdown of types of work with quota and sales information.

Form 10-Geographical breakdown showing sales to date and percentage comparison with the previous year. Pronounced differences up or down are examined for reason.

Form 11-Classification of work. Here again with sales to date and percentage comparison with previous year. A complete variety of work from combination black and white through medium run multicolor.

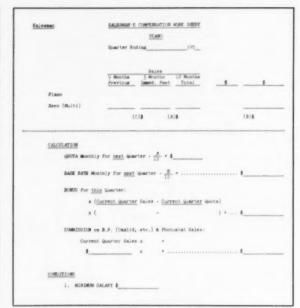
What's right in a compensation plan would produce a wide variety of ideas. This statement is justified by the NAPL survey of compensation arrangements,

Form 10

Quarter			
TERRITORY	SALES TO DATE	1956 % SALES	1955 % SA L.E
A - Boaton Proper			
8 - 10 Mi. Radius North			
C - 10 Mil Radius West			
D - 10 Mi. Radius South			
E - Northern Mass			
F - Western Mass.			
G - Southern Mass.			
H - Maine		1	
I - New Hampshire			
J . Vermost			
K - Rhode Island			
L - Connecticus			
M - Outside			

CLASSIFICATION	SALES TO DATE	1956 % SALES	1955 % SALE
A - A Color			
B - A Other			
C - B Color			
D - B Other			
E - C Work			
F - Plana g. Tel Ca b. 45 hour c. Other Comb. Work			

TO. DATE. FROM COPPER TO SUMMET TO. DATE. FROM COPPER TO SUMMET TO SUMMET FROM COPPER TO SUMMET TO SUMMET FROM COPPER TO SUMMET TO SUMMET FROM COPPER TO SUMMET TO PRINTIPS SAME of this errangement shall include those ordinarily elsestified as: RES FRINT Conside, FROMOTAT, and RESO (Saliti); and FLADO (Inciditiographic). COMPRESSION shall be comprised of (a) sensibly BASE RATE, redetermined quarterly from the FRITING shale research sensions, and (b) a quarterly BOSE, determined on overage over 4070A with respect to those sales. THE MOTHER BASE RATE is redetermined quarterly from the previous [2-sension* value anyone as: FRITING shales x S. THE MOTHER FARM is delivated in the excess of the current quarter's total FRITING value over quote. The rate shall be THE SUMMET I shall be sensioned from the excess of the current quarter's total FRITING value over quote. The rate shall be S. THE TOTAL TOTAL SAME and the sension of the RATE of the SUMMET CONTROL of the sension this credit for sales. The salesman may odd to or SAME RATE and 2070A. Colla sensil be sade at the sincertain of the Base Sanagar, alone of call will lise the salesman this credit for sales. The salesman may odd to or SAME RATE and 2070A. Colla sensil be successful to sales and the salesman may be an any alone sales or takes any accounts at the dispersion of the Same Same, and the same relation of the salesman to the company sales and the salesman in his componention of the Same Same Same Same of the which they will be credited the salesman in his componention of the Gregory beyond the send-monthly interest of paymen. The component previous prevent the payling and so to severation of the foreign payling and to the order classifications, sales percentages, or where factors of exceptual or the sales and sales in the sales factoring and sales and the lead of the sales classifications, also percentages, or where factors of exceptual or the sales and sales factoring and so the sales classifications.



Form 13

Form 12

which probably is still available for study. No matter what method you wish to

- use, it should be designed to:

 1. Pay on a scale your operation can
- afford.

 2. Furnish the salesman a good living wage.
 - 3. Provide an incentive.

You should be generous with a good, producing salesman. He is just as important as a good piece of equipment. Selection, training and the wait for volume represents an investment to be protected. There is no better way to protect this investment than through an adequate compensation plan. In the NAPL survey, our plan did no better than recognition in the

"screwball" category. We know they were not being critical, but perhaps felt our plan out of the ordinary and complicated. I'm not sure. We do admit there's more to it than a straight 10 per cent commission, or a draw against commission.

Like so many others, we start our new men on a salary base and assign him a territory. This territory may be established, partly established or entirely new with little or no assigned business. Against that starting base, we set a quota representing the sales volume he must produce at our commission rate to justify the salary. All base rates are adjusted quarterly.

When the time comes, and this naturally varies according to the man and the territory, that he justifies this base for a quarter, our regular plan swings into action.

The first thing we do is to give him the compensation arrangement in writing. We feel this is extremely important and makes for understanding, rather than present or future misunderstanding. We then prepare his first quarterly work sheet which shows his volume and contains the calculation of base rate, bonus and commission.

The approach we take is a 12 months' running average of sales. Since at this time we have but one quarter, this is used and carried along with the next nine months' totals until we have the desired twelve months' experience. The volume for the first three months is totalled, and since he has exceeded his quota, an overage commission is paid on the difference. This volume is then divided by three and a new higher base and quota set.

At the end of the next period, he again receives a bonus on overage if there is one. The two quarters are totalled and divided by six to establish once again the new base and quota.

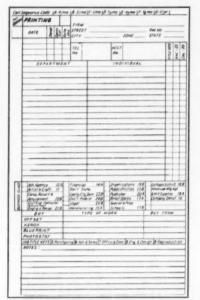
This goes on for nine and 12 months. After this, we drop off the quarter of a year ago and add the new one. In certain instances, we pay a straight commission on sales of services allied to printing. He is not obligated to push them and they are not a part of his regular base compensation arrangement.

Here are points that should be brought out in connection with this method of compensation.

- Provides a more stable base and takehome pay which the men like. Sharp drops are eliminated.
- 2. Incentive is there by paying overage commission each quarter.

Form 14

EXPENSE REPORT	FIRST CAL		ENDINES MITTAGE		M. PHOTO	PL AND	Sen Plant	MACHINE	DATE	TATE	195
0410	CITY	ACCOUNT	INDIVIDUAL	DEPT		WE I	NTER	RED	American	MENTS .	on Following
BALESMAN						-	-	1			
HOTEL AT					1						
BREAKFAST			-		+	Н	+	H		-	
LUNCH					+	H	+		1	-	
DININER					+	H		1			
TRAVEL BY						11					
ntun su numbumi											
n n					ŧ						
MISC EXPENSE					T	H	+				
					1						
							+				
		is a second			-						
					t	Н					
	Apprione	ANTOWNER FROM DO NOT BUPLIC	ATE MEMOR ON BAM	E BUBLICS	10 s	PROPE	THAN	014E 10	Bivibile		
TOTAL EXPENSE											



Form 15

3. When plotted graphically, we find sales earnings are paid on a slightly retarded basis. This, of course, is an advantage to the company, that does not affect the activity of the individual.

Form 12 is the compensation agreement between the company and the salesman. It covers the following:

- 1. Services which he may sell. This must be set forth because we have other selling divisions within the company.
- Of what the compensation shall consist.
- Method of figuring base rate along with the percentage of sales.
 - 4. Method of figuring quota.
- Method of figuring overage bonus and the rate to be paid.
 - 6. Territory operations.
- Compensation adjustment on contract or close price sales.
- Obligation of company to salesman on his salary.
 - 9. Effective date.

Form No. 13 is the salesman's compensation work sheet. It is prepared by the accounting department quarterly. On it are the sales totals, together with calculation of the new base rate, bonus and commissions.

New men are on a minimum salary. Where this is so, the figure is indicated. We have attempted to limit the amount of paper work required of our salesmen. They are asked to turn in a daily report of calls and make out an expense voucher.

Territories are operated on the basis of protected accounts, so they must fill out an account registration form in order to obtain this protection. Occasionally, they write orders for one-time jobs and do not wish to protect permanently the account. Where this is so the unassigned account credit memo form is filled out. This is all we ask.

Now for a look at these forms as well as those given the salesman each month summarizing his activity.

Form No. 14 is the daily report and expense voucher. It contains names and dates and provides some space for comments. In the past, we have made occasional spot checks of time utilization as well as time allocation by department, the latter being a guide from which sales expense is charged to the various departments. The form is printed on translucent paper so that Ozalid whiteprint copies can be made and routed if necessary, or a copy can be made and a diary kept for future action.

Form No. 15 is the account registration form. Space is provided for firm name, address, telephone number, contacts, date of registration or change, accounting department account number, business classification for mailing list code, what they buy or are prospects for, present source of supply and notes. It also is on translucent paper. When properly filled out, they are turned over to the sales manager for approval. Three copies are then made. One goes to accounting for I.B.M. registration of the account to the salesman. One is sent to advertising for mailing list action. The third goes to the salesman for his record. Original copies are kept in the sales office and filed alphabetically by territory

When changes occur, the salesman turns in his copy with alterations noted. The original is changed and new copies routed as before if the department is affected by the changes.

Form No. 16 is our unassigned account credit memo. Here we ask them to identify the job by filling in the name, date, approximate values and the work order number. Space is also provided for such additional information as may be neces-

ate Value
der Number

Form 16

sary to obtain approval from the sales manager. After being approved, the form goes to accounting to be included with the monthly total. Soon after the end of the month, the salesman is given a complete reporting of his activity. Two forms are involved, which are put together by the accounting department.

Form No. 17 gives the salesman a complete month-by-month record of his sales against the quota as well as a record of performance. At the beginning of each year, we establish a monthly call quota and set a budget for field expense. These figures are accumulated from the daily report and expense voucher in the sales office. From there, they go to accounting to be included in the report.

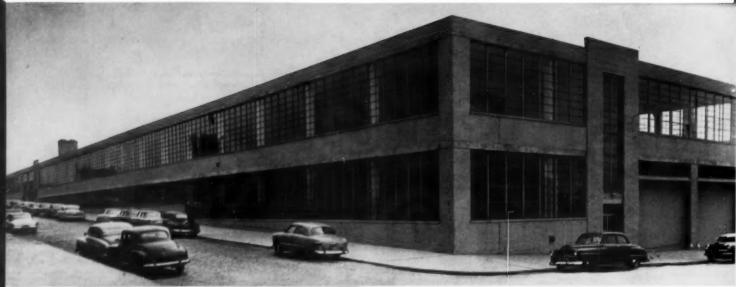
Form No. 18 is the rundown of sales from registered buying accounts as produced by I.B.M. Here we show account name, account number, previous years' sales, sales to date this year and then those of the current month. The duplicate section on the right shows sales of reproduction services. Sales properly recorded on the unassigned account credit memo form are written on the final sheet and added to the machine total.

We consider this report extremely helpful in sales management control as well as helpful to the salesman. Both can keep a close watch on key accounts. With a record of previous years' sales indicated, growth or drop off can quickly be sported and checked. Inactivity is noted. It also provides an aid in shifting territories or accounts.

Form 17

Form 18

Form 1/	Form 18
YEAR	CONTOURS CREATED TRACE T
TERRITORY DAN STR. MAR APR MAY JUN. JUL. AUG. SEPT OCT NOV. DEC. TOTAL	AUVANCED WARAGEMENT PRO 5.71 ALLIED AMER WIT AUTO 185 1466 AMERICAN EMPLOTERS 185 9054 AMERICAN EMPLOTERS 185 9054 AMERICAN EMPLOTERS 185 9004 AMERICAN EMPLOTERS 185 90 2470 AMERICAN EMPLOYS 185 90 2470 AMERICAN EMPLOYE
E.T. FHOTO - PLANCORAPH GRECK MINISTRILY TOT MONTHILY COUL COUNTRY COUN	ATOMIC INSTRUMENT CO A 36 A ATOMIC CONSTRUMENT CO A 36 A ATOMIC CO ATOMIC CO ATOMIC CO ATOMIC BAGGER WFG CO ATOMIC CO ATOMIC CO BENEVA CO CO ATOMIC BLANCHARD WESTERN CO
PERTORMANCE CALLS QUOTA R CALL QUOTA PLUD FORDESE	BOSTON INSUDANCE (0 10080 BOSTON A WAINE MAILENT 10135 BAW DAN C SULLIFAN 10136 BOSTON MAINE FRANSE 10136 COLUMN SOCIETY AF CEVIL 10447 COLUMN SOCIETY AF COUNCIL 10467 CHILDERINS BOSTON COUNCIL 10467 CHILDERINS BOSTON COUNCIL 10566 COLUMN SOCIETY AF CENTRISTORG



Publishers Printing-Rogers Kellogg Corp. has just moved into its new plant in Long Island City, N.Y. New building has 105,000 square feet

Two Firms Merge, Build **New Combination Plant**

Publishers Printing-Rogers Kellogg Corp. operating largest combination offset-letterpress plant in East

* Publishers Printing-Rogers Kellogg Corp. is now operating in Long Island City, N.Y., a new plant whose 105,-000 square feet of floor space is said to make it the largest letterpress-lithographic printing house in the eastern area.

Completion of the new setup was the time chosen for announcing the merger of Publishers Printing Co. and Rogers-Kellogg-Stillson, Inc., which since 1950 has operated as separate firms with a combined plant in the Manhattan section of New York City.

Executives are Sampson R. Field, president; William H. Walling, executive committee chairman; John G. Gantz, executive vice-president; C. L. Mortimer, finance committee chairman; Donald W. Mortimer and Ernest Schmatolla, vice-presidents, and Edward Blank, plant manager.

The modern split-level plant provides ample space for a wide range of services. Nearly \$1-million worth of additional and replacement equipment was installed. Main objective of the move to Long Island City was to carry on the business in a plant completely equipped to meet the highest standards of efficiency and quality.

Equipment covering a comprehensive line of work includes the largest sheet-fed presses available. Fourteen job

presses turn out one- and two-color work in 14x20 to 27x41 sizes. One- and two-color and perfector cylinder presses range from 42x56 to 461/2x70. The rotary letterpress department has 40x59 to 52x76 machines for two- and five-

(1) Composing room equipped with Teletypes for receipt of new, changed telephone numbers in New York City area from phone company exchanges; numbers are set in type at once for daily printed reports. (2) Form makeup and lock-up section of composing room. Central air compression system with hose outlets every 50 feet provides system to eliminate dust, spray residue. (3) Dexion steel shelving used to store forms (1) Proofing section of composing room. Plant is well lighted with continuous fluorescent tubing in 96-inch slimline fixtures. (2) Pressrooms include job section with 14 single- and two-color presses in sizes 14x20 to 27x41. Cylinder pressroom has perfectors, single- and two-color presses from 42x56 to 46½x70. Rotary letterpress division has two- and five-color presses from 40x59 to 52x76. Pressroom has blue-tinted windows

color production. Two- and four-color offset litho press sizes run from 30x39 to 52x76. Premakeready was installed for plates and type forms for all presses.

Pressrooms, bindery, offices, and all other sections are spacious. Continuous 96-inch slimline overhead lighting throughout was designed to allow for future movement or expansion without changing or adding to the system. Two 75-hp and one 15-hp units power the central air compression system. They work individually or together to insure continuous air compression to each press for dry spraying and for holding sheets to cylinder to prevent slurring. Air-hose reels at 50-foot intervals permit quick blow-off of spray and dust from all material. The plant has its own foundry equipment where molds of electrotypes are made from unlocked forms.

General offices are centrally located on a special level. Glass enclosures feature the service rooms, the dock area, and the production office, which overlooks the rotary press section. Special services near the production office include inkroom, foreman's office, plate storage and preparation, line-up and roller coating.

There are four in-plant loading docks. Each is large enough to house an entire trailer truck. A special device automatically lowers, raises, and extends the dock leveler to the truck. Dock levelers, outer and inner doors are push-button controlled.

Full-time operation began five months after the first press was moved from Manhattan. The mass of detail and the entire technical phase of the huge moving job was under the direction of plant manager Edward Blank.

A scale model of a three-dimensional floor plan was made in movable sections representing office, pressroom, composing room, and bindery areas. Then dimensional models of equipment were made. Many combinations were tried to find the best layouts. Several layouts of each section were photographed and shown on a screen during staff sessions. Revisions were made to combine the best features of each layout.

The moving schedule fixed the dates for stopping, dismantling, trucking, reërecting, wiring, and running each press. Dates were also set for ordering and installing new equipment. Each press worked in the New York plant until an identical unit, or one that could do the same work, began running in Long Island City. New equipment was ordered early to release additional presses from the former location.

Blueprints located all equipment for erectors, electricians, plumbers, and for workers on steel girders that had to be encased in concrete under the five 76-inch presses. Drawings for each contractor showed the location and extent of his services, and each was given a schedule timing his part of the coördinated setup job.

⁽³⁾ Offset pressroom has two- and five-color presses from 30x39 to 52x76. New equipment in pressroom includes two 76-inch Miehle rotary letterpresses, No. 56 Miehle two-color letterpress, two 76-inch Harris two-color offsets, and No. 41 Miehle two-color offset press. (4) Section of bindery



How to Use Water Color Inks For Screen Process Printing

- Water color inks can be used but limitations must be understood
- Textile screen work requires different equipment and techniques

Fifteenth of a Series

By Victor Strauss

Presentation Press, New York City

★ The next kind of ink on the docket is water color. Many schools and hobbyists, and even professional screen printers, want to avoid the fire and health hazards attendant upon all inks which need organic solvents for dilution and for cleaning. Water colors are free of these drawbacks. Many people are, therefore, surprised that water colors are not more popular in silk screen.

Water colors can be used for screen printing as long as their limitations are understood. The greatest asset of water colors is also their strongest liability. Water is their greatest asset because it is cheap and certainly neither a fire nor a health hazard. But water has the disappointing habit of affecting paper and paperboards, the silk of the screen and also the knife-cut film.

All three, paper, silk and knife-cut film, are very important in screen printing, and it is most undesirable to have them adversely affected by the ink. The silk tends to absorb some moisture and, thereby, to lose its tautness; the knife-cut film must adhere with extra strength to the mesh, or it, too, will soon loosen up and tend to come off the screen.

Finally, the paper can become very badly buckled. Water has the tendency of penetrating the paper before it evaporates into the air. Thin paper, particularly if covered with large areas of water paint, can change so much that it becomes completely unfit for register or multicolor work.

Have Excellent Printing Qualities

But it must be said, to balance the scales, that water colors have excellent printing qualities. They are also very appealing and are as matte and as brilliant as colors of the poster line; their advantages of not being fire and health hazards make them very desirable in some cases.

To begin with, water colors may be used only for multicolor jobs with very loose register, or for single-color jobs. The screen should be stretched quite taut, and the film adhered almost to the point of burning-in, a thing permissible only with rather bold designs. Do not, in the beginning, use paper thinner than 65-pound cover stock or 100-pound offset paper, and avoid very large areas in the same color in your design.

If you observe these points, you will enjoy working with water colors, and you will become more daring as you progress and accumulate experience. Water colors are normally not waterproof and cannot, therefore, be used on outdoor jobs. The adhesion of water colors is also not good enough—generally speaking—to permit their use on many stocks other than paper. Printing with water colors is, therefore, out of the question when it comes to leather, glass, tiles and plastics.

Textile printing media are the last group in our discussion of inks. But as textile printing, in general, is beyond the scope of the silk screen service business, it will surprise you that textile printing media should be discussed here at all. We are again involved in a tangle of terminology.

Silk screen is a very important branch of textile printing. When the screen proc-

Next Month...

* While you're giving thanks this month on Nov. 22, and keeping up with your favorite graphic arts trade journal reading, you may be curious about what's coming in the December issue. Financial management for small printers will be featured in one article, bound to interest the 92 per cent of U.S. printers who are small. Another one, too, for small printers will involve costs and how to determine them-second article in a series. Offset printers will want to read an article on how to advertise and sell lithography-this is in addition to the regular offset department which runs from four to six pages. Another new printing plant on the horizon, this time a small plant, will be pictured and described. An article on an outstanding private press, another in J. L. Frazier's series on "Modern Type Display," Typographic Scoreboard, roundup of 1957 Printing Week plans, a timely bit on the subject of Christmas cards, and a host of others will be top features.

ess began to be known, hand printing had not yet died out as completely in textile printing as in the graphic arts. At a time when the Smithsonian Institute was the only place where one expected to see a hand-operated printing press, hand blocking was still a living art in textile printing. Hence, the textile printing industry originally took to silk screen printing much stronger than did the graphic arts. These two branches of silk screen have developed along different lines and rather independently of each other.

Textile printing requires very different equipment from that to be found in a commercial silk screen shop, and the techniques of stencil making are not the same either. Textile printing is dye printing, whereas all our inks are made with pigments. Both pigments and dyes are coloring matter, but they work very differently in textile printing.

In printing with pigmented inks, a film of ink is deposited on the surface of the stock, and the surface bears only the color of the ink. The rest of the stock is not changed in color. Take a piece of silk screened paper, tear it, and you will see that it has retained its original color.

Due Printed Cloth Shows Pattern

Dye printed cloth, on the other hand, gets colored through and through. You can see the pattern of a print on the back of a tablecloth, for example, and it is even a criterion of highest quality silk screen printing that both sides of a silk screened scarf should look alike.

The fact that dyes penetrate into the fiber of the fabric is only one difference between printing with pigmented inks and printing with dyes. Another difference is that prints made on paper with inks do not need any additional treatment once they are dry, whereas dye prints must be subjected to all kinds of chemical processes before the fabric can be used. In dye printing, chemists must be employed to select and compound the dyes, and to plan and supervise the finishing processes. Nor can dye printing be done without a lot of very expensive equipment.

But it is also possible to print fabrics in silk screen by a different process, using a printing medium made of pigments and not of dyes. This printing medium was originally developed for special purposes in textile printing, but it has also found favor with many people who want to decorate textiles the easy way. It should be clear to you that this process has many limitations and that, in many cases, it is not a full equivalent of dye printing. The printing medium I am referring to is also known as an emulsion; it is sold under many trade names, the best known is Aridye.

The term emulsion needs explaining, and we might as well begin with the fact that water and oil don't mix. Yet some emulsions, and cold cream and mayon-

naise are two examples of this type, are mixtures of water and oil.

Other emulsions are differently constructed. Textile printing pastes, for example, are emulsions of film formers, organic solvents and water in which pigments are finely suspended. Textile emulsions are of a type different from cold cream and mayonnaise. They cannot be diluted with water but only with organic

Textile emulsions act much like our regular inks; they do not dye the fabric through and through but deposit the pigment only on the surface. But they are similar to dyes to the extent that the printed fabric must be cured in order to become resistant to laundering. Curing of textile emulsions is done in curing ovens, or even by ironing the print with a very hot iron over a piece of cloth dampened with vinegar. The film forming components of the emulsion are thereby set. Setting means that the print becomes attached to the fiber of the fabric more firmly and thereby acquires better fastness to laundering.

Emulsions for Textiles

Textile emulsions are sold under various trade names. A line consists of the emulsion and pigment concentrates. Here the word concentrate is certainly no exaggeration! You will be surprised at the tinting strength of textile pigment concentrates. In preparing the printing paste, you begin with the emulsion, a whitelooking but colorless paste, to which you add the concentrated pigments. Use the smallest possible amount of pigment concentrates. The emulsion is cheap, the colors are very expensive. And, if you want good washability, you must press firmly with your squeegee while printing and avoid double layers of ink wherever possible. Plan your design accordingly. And, finally, cure thoroughly! If you observe these points, your prints will have very good laundering qualities.

Textile emulsions are excellent for corton and linen but less good on silk and wool. As to synthetic fibers, there are so many nowadays that it is best to ask your supplier in each specific case or to run a test yourself. The main danger in the life expectancy of your kind of textile print is mechanical abrasion—the washing machine, to be specific. Repeated laundering will pale the colors of your print.

Textile emulsions are diluted with solvents of the kind used for oleo-resinous inks and enamels, but you should always check with your supplier to be absolutely sure. You can use knife-cut film or maskoid screens with textile emulsions. Knife-cut film screens have a tendency to become brittle under the influence of textile emulsions. Adhere the film very strongly, especially if you want to make a larger run. For wash-up, use the same solvents as for reducing.

How Permit Imprints Facilitate Mailings for Printer's Customers

★ If you use the mails in a big way, you know about permit imprints. If you don't, these are the printed indicia on the corners of the envelopes or mailing pieces which permit you to mail these pieces without attaching postage stamps.

It's a handy deal for all concerned. The Post Office eliminates the cost of issuing the stamps and cancelling them. The mailer avoids the cost of affixing the stamps. And he pays the postage in a lump sum. If he wishes, he may deposit a larger amount with the post office and use it as needed.

Obviously, mailing under printed permit is practical only when mailings are reasonably large and frequent. The permits must be printed and must meet Post Office regulations for the class of mail being handled. And a minimum number of pieces must be mailed at one time. Let's take a quick look at the principal imprint

First Class Mail

QUEFALO =	FIRST CLASS
AUGUST -	U. S. POSTAGE
15) -	PAID 3 CTS.
1EW 109 -	PERMIT 237

Imprint must show

- (a) First Class Mail
- (b) Amount of Postage
- (c) City and State
- (d) Date (hour may be included if mail can be dispatched at that hour).
- (e) Permit Number

Minimum: 300 pieces of identical

Second, Third, Fourth Class Mail



Imprint must show

- (a) Amount of Postage
- (b) City and State
- (c) Permit Number

Minimum: Second and Third Class, 300 pieces of identical matter. Fourth Class, 250 pieces of identical matter

Bulk Third Class

Permit must show

- (a) City and State
- (b) Permit Number
- (c) Words Bulk Rate or abbreviation

BULK RATE

U. S. POSTAGE PAID BUFFALO, N Y PERMIT 237

(d) Amount of postage is not shown when per pound rates apply. It should be shown when per piece rates apply. It must be shown when mail is subject to the minimum charge for odd size or

Minimum: 20 pounds or 200 pieces of identical matter.

Note: (c) is a recent change. It replaces the notation Sec. 34.66 P.L. & R. formerly required on this class. Stocks of material now on hand and bearing this notation may be used until exhausted.

Exceptions to minimums:

When a first class mailing will reach the minimum in a day, a part of it may be mailed early to cooperate with the Post Office. When a mailing of any class extends over two or more consecutive days, less than the minimum may be mailed on the last day to complete the mailing.

Form of Imprint

The Post Office accepts printed imprints in any one of three forms, all shown here. There is no specified type style. Any color of ink may be used. The imprint must be legible and all parts of it easily read. It must be printed by letterpress, lithography, multigraph or similar mechanical process. It cannot be hand stamped. It must be placed in the upper right corner of the address side of the mailing. Adjacent printed matter or decoration must not interfere with it.

Other Rules

There are, of course, many other regulations governing the use of permit imprints. All mail must be faced. First and fourth class must be separated according to postage paid. Third class bulk must be sorted by destination.

Your postmaster will be glad to supply you with complete information on this or any other phase of mailing. Enlisting his aid is worth considering. He may be able to save you time and money.-Clement Comments, house publication of the J. W. Clement Company, Buffalo, N.Y.

Keeping All Parts Oiled

For good maintenance, make sure all machine parts are well oiled. To avoid missing easily overlooked oil holes, paint around them with a bright color, yellow

An oiler about the size of a fountain pen can be purchased to use in inaccessible places. It has a fine needle point about an inch long and has a transparent barrel to show the amount of oil inside.

Causes of Paper Pick--How to Measure It

- Paper will pick if force required to split ink film after impression exceeds paper strength
- Ink maker, paper maker, and printer alike, want problem clarified, seek method to measure it
- National Printing Ink Research Institute, celebrating 10th year, now engaged in pick studies

★ The need for a comprehensive investigation of instruments and techniques for the reliable measurement of pick resistance has been felt sharply during recent years by the entire graphic arts industry.

Ink maker, paper maker and printer alike have expressed a desire for clarification of the problem and for a satisfactory method to measure this property.

The result has been an intensive examination of the surface bonding strength of paper and the development and evaluation of pick testing instruments and devices by many graphic arts organizations in the United States and abroad.

Several years ago, the National Printing Ink Research Institute at Lehigh University, Bethlehem, Pa., similarly became interested in the problem of picking and set out under its instrumentation program to make a study of some of the existing instruments and techniques for measuring pick resistance with the purpose of determining the most suitable and reliable of the \$50.

Shortly after the initiation of the project, however, the program was expanded to include the simultaneous study of the variables which affect and often control picking and pick measurement. This article will deal with this latter phase of the program which figures so prominently in explaining pick behavior.

Why and When Paper Picks

Paper will rupture or pick if the force required to split an ink film following impression exceeds the strength of the paper or its surface coating. There are several different ways in which papers pick. Some papers rupture within the body stock; others rupture between the body stock and the coating due to poor adhesion of the coating; still others "fuzz" or shred and only a few fibers are lifted away from the surface. Each type of picking constitutes a source of trouble for the printer, although the severity of the problem depends to some extent on the nature of the rupture.

The strength or pick resistance of paper or board stock is usually measured by instruments which imitate press action in a realistic way, although there are also methods for measuring pick which do not simulate press action, as for example the Dennison and the K and N ink tests, and findings with tensile strength testers.

The NPIRI pick testing studies were confined chiefly to work with the proof

By Carolyn E. Moore

Carolyn E. Moore, who wrote the accompanying article on variables affecting pick measurement in paper, is assistant to Dr. Albert C. Zettle-



moyer, director of the National Printing Ink Research Institute at Lehigh University, Bethlehem, Pa. She is a graduate of Bucknell University with a degree in chemistry. She has been with NPIRI for the past six years, originally as a research assistant in the laboratory. She is a member of Sigma Xi and Phi Sigma. NPIRI

headquarters are located in Lehigh's chemistry building. The institute is celebrating its tenth anniversary this fall.

press and with four presently used commercial pick testers: the Hercules Print Tester (Brookfield Engineering Laboratories), the IGT Printability Tester (Instituut voor Grafische Techniek, Amsterdam), the LTF Pick Tester (Lithographic Technical Foundation), and the Waldron Pick Tester (John Waldron Corp.).

Pick testers are essentially miniature presses, and so the variables which come into play during the printing process can be considered important factors in the operation of the testers as well.

These variables readily fall into two categories: the measuring variables of ink tack and printing speed which are deliberately changed during testing, and the other variables which can alter pick measurement and which, therefore, must be controlled within reasonable limits during testing. The latter group includes such factors as temperature, relative humidity,

ink film thickness, roller composition and several others.

Ink tack and printing speed are referred to as "measuring variables" because most pick testers are operated by holding one of these factors constant while the other is varied until picking occurs. The pick resistance of a paper is then reported in terms of both ink tack and printing speed.

Changes in tack and speed exhibit the most pronounced effect on picking of all the variables, because both are directly responsible for the stress exerted on the paper surface. The tack of the ink determines the force required to split the ink film after impression, while printing speed affects both the period of contact between paper and ink and the rate of separation of paper from the inked form.

Printing speed, usually expressed as linear velocity in feet per minute, is generally considered in a way which implies it to be a complete measure of the rapidity and severity of picking action in the printing nip. Linear velocity has actually only an indirect effect on the severity of picking action, however, since the separation velocity is also dependent upon cylinder diameter and cylinder distortion under pressure. Thus, the picking velocity for a given ink-paper combination can differ considerably from one press or instrument to another.

Temperature-Humidity Important

Any ink-paper relationship is closely dependent on temperature and humidity control. The measurements of tack and other rheological properties of inks are very sensitive to temperature changes, and

Conference Marks NPIRI 10th Anniversary

Recent developments of the physical and chemical processes employed daily in the manufacture and utilization of printing ink were discussed at a technical conference, Oct. 18 and 19, at Lehigh University, Bethlehem, Pa. The sessions marked the tenth anniversary of the founding of the National Printing Ink Research Institute.

Roswell E. Fisher, director of Time, Inc., was the speaker at the opening session on Oct. 18. Technical sessions on rheology and tack were held Thursday morning, Oct. 18. Use of waxes and dissolvers for printing inks were discussed Thursday afternoon. Dr. J. S. Long, professor of chemistry at the University of Louisville (Ky.), was the speaker at the banquet Thursday evening.

An instrument show opened the Friday morning sessions. Speakers discussed paper printability, ink properties and microscopy of printing at the closing session Friday afternoon.

The National Printing Ink Research Institute was established at Lehigh University in 1946. It was founded to engage in scientific research on printing inks, on the equipment and techniques involved in their production, and on the printing surfaces to which they are applied.

Originally there were 33 members of the organization. The recent merger of the institute and the National Association of Printing Ink Makers expanded the membership to 88. Dr. Albert C. Zettlemoyer, professor of chemistry at Lehigh University, serves as director of the Institute.

pick testing should be similarly affected because of its dependence on ink tack. Also, some paper properties are irreversibly altered by exposure to high relative humidities.

Surprisingly enough, small temperature changes did not have any observable influence on the pick measurements obtained either with pick testing instruments or with the proof press.

On the other hand, there was evidence which indicated that changes in relative humidity markedly affected picking, with increased relative humidity causing increased picking. However, this latter relationship did not hold for all ink-paper combinations, and there were some cases in which drastic changes in relative humidity neither caused picking nor altered its severity.

Divergent opinions of the effect of temperature and humidity have been reported by many working in the general field of pick testing, but all agree that reasonable control of these variables must be maintained for valid measurements.

Significant changes in picking were found to result from changes in ink film thickness as small as two per cent of the total amount of ink. There was also some evidence of upper and lower limits of ink film thickness beyond which picking seldom occurred. The lower limit was directly associated with the amount of ink necessary for complete coverage of the paper. Adequate coverage is another variable which influences picking results, for poorly covered prints generally indicate higher pick resistance than fully covered prints.

Solid Areas Cause Trouble

Furthermore, most picking problems arise in the printing of large solid areas, and very seldom do halftones or type matter constitute picking trouble. Such observations have led to the hypothesis that paper surface stressed by a splitting film can be strengthened by adjacent unstressed areas not contacted by the film. This hypothesis also helps to explain the repeated occurrence of picking a short distance away from the edge of a print where a large area of uncontacted paper is available to serve as reinforcement.

With respect to the variable of printing pressure, it was found that over a ten-fold change in pressure no significant change in picking was detected. Other workers have also reported only a slight dependency of picking on pressure, although there are controversial opinions on this variable, too. The change in pressure referred to here was beyond that required to produce full coverage, for below this pressure, picking results are nonreproducible, and the pressure effect is difficult to determine.

The effect of cylinder diameter on picking must also be considered, particularly because of the great difference in roller sizes between a production press and a

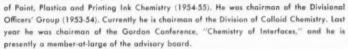
Dr. A. C. Zettlemoyer Heads Ink Research Institute

Dr. Albert C. Zettlemoyer, director of the National Printing Ink Research Institute, is professor of physical chemistry at Lehigh University. He graduated from Lehigh with a B.S. degree in chemical engineering and an M.S. in organic chemistry; he later received

his Ph.D. in physical chemistry from the Massachusetts Institute of Technology where he was an instructor in 1940 and 1941. He was a research chemist at Armstrong Cork Company before returning to Lehigh.

Dr. Zettlemoyer has served on technical committees for several industries and as a consultant for a number of companies over a period of years. He is a member of Sigma Xi, Tau Beta Pi, New York Academy of Science (Fellow), AAAS, American Institute of Chemists, TAGA, TAPPI, ASTM, International Association of Printing House Craftsmen, Chemists' Club of New York, and Saucon Valley Country Club.

Dr. Zettlemoyer has over 60 publications in the fields of surface chemistry, rheology, and dispersions. He is a past chairman of the Lehigh Valley Section of the American Chemical Society (1953) and of the Division





composition can vastly affect ink tack on a small test instrument, since there is no continuous flow or replacement of ink through the distribution system. The influence of roller composition on

The influence of roller composition on picking may well explain why picking speeds differ from one instrument to another and why there is poor correlation between instruments in rating a series of papers according to strength or to pick resistance.

Much Work Remains to Be Done

This investigation of the variables affecting pick measurement provided the foundation for the evaluation of the pick testers studied and pointed the way to the causes of erratic behavior, anomalies, and disagreements in the results from the various instruments. It is felt that considerable experience is required for predicting actual press performance from the data of a pick tester and also that extreme caution should be exercised in making the prediction. There is much remaining to be understood and explained in pick testing just as there is much work to be done in any printing ink-paper relationship study. Ample evidence is the increased activity in the field of printability in many graphic arts organizations.

This work was carried out by NPIRI in coöperation with other groups similarly interested in the problem of picking. This year NPIRI celebrates its tenth anniversary of service to the graphic arts. Supported through the National Association of Printing Ink Makers by almost a hundred ink manufacturers, the Printing Ink Institute conducts research in dispersion, rheology (the science of flow), test methods and instrumentation as well as

(Turn to page 75)

pick tester. The exact role that cylinder size plays in picking has not been definitely established; indeed, the effect is a complex one to consider, for a large cylinder has a higher splitting area but a lower splitting rate than a small cylinder, and these two effects influence the severity of picking conditions in opposite directions. The large dimensional differences make suspect the ability of a pick tester to predict commercial press performance, although much more information should be gathered before this important question can be settled satisfactorily.

When the results obtained with the pick testers and the proof press for a special series of papers and inks were compared, a considerable difference in strength rating was found from one instrument to another.

In an extreme case, one paper was rated strongest by some of the testers while several testers rated it as having poor pick resistance. Differences in cylinder size may have been partly responsible for the disagreement.

However, it is believed that the greatest influence on picking results is due to roller composition. Dramatic evidence of the importance of roller composition was demonstrated by an experiment designed so that all variables except roller composition were held constant. For the same ink-paper combination printed under exactly the same conditions except for roller composition, results varied in degree ranging from no picking to severe and complete rupture of the paper.

Various roller systems have been known either to increase ink tack by absorption of a part of the vehicle by the rollers or to decrease tack by migration of roller plasticizer into the ink. Of course, roller

Small Printers Need Help in Solving Cost Problems As Aid in Running Business

- About 92 per cent of American printers have fewer than 50 employees
- Most small printers don't know their costs but should to be successful

First of a series

By Olive A. Ottaway

★ I would first like to pay tribute to the editor of THE INLAND PRINTER because he has "discovered" the crying need for better communications and workable formulas for the "little fellow," and has requested that this series of articles be devoted to them.

Many trade associations and service organizations would be smart if they, too, realized the need of the *small* printer, who, because of the complexity of his operation, needs the strengthening hand of knowing what others are doing.

Many persons have become so mass production conscious, so aware of the immensity of certain undertakings, the vastness of projects, and the huge sums of money expended by governments and large organizations that there is a great tendency to overlook the notable contribution made by small business.

We become so imbued with all the adjectives denoting largeness that if we were asked to define the term "small" it is doubtful if we would even then grasp the significance of the contribution made by the multitude of those referred to as "small."

If we think for a moment in terms of the impact of a snow storm, a deluge of rain, the sand upon the seashore, and the good earth which yields our harvests, then perhaps a fuller realization will come to us of the importance of small or minute particles which, when operating together, can make quite an impact on an immovable object.

If each of these little particles were examined under a strong microscopic lens, it would be found that they are not all alike, that they each have individuality of form and color and strength, but brought together as a whole they become a great force.

Thus it is with the graphic arts industry. Too many are apt to think only of the complete printing industry, or single out a few exceptionally large firms and cite them as being typical.

Actually, such conjectures could not be farther from the truth. Perhaps a few statistics taken from a recent survey made by American Type Founders, Inc., on Executive Secretary
of
Toronto Graphic Arts
Association

Author of "Costs for Printers"



American printing plants and the number of their employees will be enlightening:

Printing Plants and Their Employees

37.8% have fewer than 4 employees

23.9% have from 4-7 employees 19.8% have from 8-19 employees

10.6% have from 20-49 employees

3.9% have from 50-99 employees 3.4% have from 100-499 employees

.6% have 500 or more

100%

From this, it will be noted that the largest number of firms lie in the fewer-than-four employees catagory, while 92.1 per cent of all printing firms employ fewer than 50 employees. Therefore, it would seem that educational projects, and such information as costing and estimating data, should be directed to the market in which the greatest number of firms operate, rather than to the other 8 per cent who have 50 or more employees.

A further statistical fact is also interesting. The Printing Industry of America, in the most recent issue of Ratios for Better Printing Management, in giving the highlights from the financial statement of that year, show that a preponderance of firms contributing to these studies are to be found in the 50 or fewer employees grouping. This includes both sales and administrative employees, not just plant employees. According to sales, it reads like this:

Less 1	than \$75,0	00	of Sales
From	\$ 75,000	to	\$150,000
From	\$150,000	to	\$300,000
From	\$300,000	10	\$500,000
From	\$500,000	to	\$750,000

This figure represents 78.7 per cent of the total compilations and shows that 21.3 per cent (the remainder whose sales are \$750,000 and up) employ from 78 to 410 persons. The composite for all firms, regardless of sales classification, shows an average of 53 employees.

Based on these figures and the ATF data, it would appear that by far the vast majority of small shop printers should become more concerned over how they operate than how the big fellow operates; more concerned over their estimating, their costing and their pricing than over what the firms with 500 employees are doing. Why? Because in the hands of the small shop printer, whether he acknowledges it or not, lies the health and wealth as well as the future of the printing industry.

If all firms having fewer than 50 employees were to close down tomorrow, where would the printing industry be, and how would you like it to go to a minority control of large firms?

Therefore, if you have 50 or fewer employees, you are a *small shop printer*, and most of the articles in this series will be directed to you.

On the other hand, many small firms have grown into the larger shop categories. If you are in the "upper" brackets, you may find some ideas or suggestions that may hold a germ of an idea. And so, if you want to peruse these articles and look over the shoulder of the "little fellow," of which the majority of your industry is made up, then you, too, may learn something which in your larger operations may have been overlooked.

If you are a large or a small operator, accurate costing and pricing is in the limelight and no one can afford to ignore it. In addition to management, many plant superintendents and other department heads, at the manufacturing level, who have any responsibility in estimating or production today should also be well versed in how costing and pricing figures are made up and how these can deviate if care and control are not exercised.

5	employees	74	firms
0	employees	116	firms
0	employees	149	firms
4	employees	96	firms
52	employees	80	firms
		515	firms

Making Even-Tint Negatives With Contact Screen

- Newton rings, dust specks, poor contact may result in vacuum frame
- Less trouble results if film and screen are held on camera vacuum back
- Here are some good suggestions from Lithographic Technical Foundation

Even under the best conditions, the making of even-tint negatives with a magenta contact screen is a tough job. While there is no easy way to do it, here are a few suggestions from the Lithographic Technical Foundation.

According to work done at LTF, you can nearly always count on having trouble with Newton rings, dust specks, and poor contact, as long as you use a vacuum frame. There is much less potential trouble if you hold the film and the screen on the camera vacuum back.

Patterns from the vacuum back grooves can be avoided by attaching a thin aluminum sheet to the vacuum back. This sheet should be about 0.005-inch thick. A piece of presensitized plate works very well. It should be about a half inch smaller in each dimension than the outermost groove covered by the contact screen. This will still give good vacuum between the screen and the film and will eliminate the effect of the grooves on the camera back. Attach the metal sheet on the vacuum back and the film to the metal with small pieces of thin, transparent tape.

Expose the film with the flash lamp, if your camera is so equipped. If not, LTF suggests a clay-coated or glazed art stock paper as a flash sheet mounted on the copy board. Select a piece that is clean and free from blemishes. Mask the edges of the sheet with wide strips of black paper. Pull the lights back as far as possible and carefully center them. Use test strips of film to determine the proper exposure.

The development of tint negatives must be done very carefully to avoid unevenness and streaks. LTF found that extreme high-contrast, fast working process developers seem to be very critical to handle in this type of work. Even when they are diluted with water, the usual tray rocking techniques and slight changes in temperature make them develop unevenly.

Some films and plates may themselves contribute to unevenness. The emulsion on glass plates sometimes varies slightly in thickness which causes uneven tints. Emulsions on films seem to be more consistently uniform.

After many experiments with special agitators and different developer dilutions, LTF finally went to a slightly softer, slower working, high-contrast, process developer. Results with this developer were very satisfactory. The tints were smooth and even. It was necessary, however, to make contact prints of these tints for dot hardness and contrast desired.

Even though this procedure requires two steps, LTF found it more economical in practice. It is much more dependable and the number of rejects ordinarily produced by the one-step method is sharply reduced.

The developer LTF used is shown in the box below.

This method will produce fairly satisfactory tints of values under 50 per cent. Ordinarily, it is very difficult to make even screen tints above 50 per cent with a contact screen. Your best bet here would be to make tints with smaller dot sizes

and use these as master negatives for contact printing the other tints. For instance, if you want a 75 per cent tint, make a 25 per cent tint first. Then use this tint as a negative and contact print it to produce the 75 per cent tint. This method is not completely satisfactory but it is better than trying to make the 75 per cent tint direct from the contact screen.

You can avoid a number of the usual difficulties in making good contact prints by exposing them with an LTF contact printing lamp. While this lamp is not a true point source, it is close enough to it. With it, you get most of the advantages of a point source and yet avoid the practical difficulties that you would encounter if you were using a true point source.

NAPL Booklet on Membership

The National Association of Photo-Lithographers, 317 W. 45th St., New York 36, has produced a booklet expounding the advantages of becoming a member of this 23-year-old organization. As the booklet explains, the association was formed to supply the whole industry with management. This it provides by way of its various helps such as supplying cost books, production charts, bulletins containing new technical information, and other useful services.

Cramer Process Developer for Tints

Solution A	Metric Units	U.S. Units	
Water (warm)	1 liter	32 liq. oz.	
Hydroquinone	45 grams	1½ av. oz.	
Sodium Sulfite	30 grams	1 av. oz.	
Sulfuric Acid, C.P.	4 cc.	1/4 liq. oz.	
Solution B			
Water (warm)	1 liter	32 liq. oz.	
Sodium Carbonate	30 grams	1 av. oz.	
Potassium Carbonate	90 grams	3 av. oz.	
Sodium Sulfite	90 grams	3 av. oz.	
Potassium Bromide	8 grams	120 grains	

For use, mix equal parts of A and B. Develop for 5 minutes at 68° F. For even development, tip the tray from the right side, bottom, left side and top. Wait five seconds between each tipping. Keep rotating like this around the tray for the full development period.



George R. Hoover



Stanley R. Rinehart



William H. Glover, Jr.



Walter E. Soderstrom



Robert S. Emslie, Jr.



Frank R. Turner, Jr.

1,500 Attend NAPL's 24th Convention in New York

The National Association of Photo-Lithographers rolled up a new high attendance of more than 1,500 at its 24th annual convention and exhibit Sept. 19-22 in Hotel Commodore, New York City, Registrants coming from many states reaped the benefits of panel, speaker and round-table treatment of technical topics and a wide variety of management-forprofit matters. One of the 62 exhibitors who used 92 space units to show equipment, materials and supplies is said to have sold \$250,000 worth of equipment. It was by all counts the association's most successful convention.

George R. Hoover, who heads Joseph Hoover & Sons Co., Philadelphia color plant specializing in lithographic calendars, was elected president. He succeeded Rex G. Howard of Howard Co., Peoria, Ill., under whom he had served as vicepresident for two terms.

New vice-president is Stanley R. Rinehart, printing division manager, E. I. du Pont de Nemours & Co. William H. Glover, Jr., executive vice-president, Sweeney Lithograph Co., Belleville, N.J., was named treasurer to succeed Penn R. Watson, Sr. of Wm. J. Keller, Inc., Buffalo, N.Y.

Continuing executives at headquarters in New York City are Walter E. Soderstrom, executive vice-president; Robert S. Emslie, Jr., secretary, and Frank R. Turner, Jr., cost accountant.

Highlighting the annual luncheon was a resolution paying tribute to Raymond Blattenberger for his achievements as Public Printer of the United States. He was cited for returning to the national treasury \$11-million formerly imposed as a printing cost on the nation's taxpayers; for reducing Government Printing Office printing costs while meeting industry wage rates; and for advancing from a humble start as printer's devil to become "head printer of the nation."

Marshall L. Russell, printing division sales manager, Spaulding-Moss Co., Boston, told how this firm operates its sales program after year-ahead planning covering forecasting, analysis, compensation and controls. (Mr. Russell's talk appears in this issue of THE INLAND PRINTER; see page 43 and following.)

Appraising plant equipment, personnel and operations was discussed by Rex G. Howard, retiring president. "The successful lithographer is not just lucky," he said. "He is the man who for a long time knew where he was and where he was going, and now at long last has arrived. To know where we are going helps us to know where we are now. An honest appraisal of your business can provide the answer. Where you are going is then largely up to you. Plants must be kept efficient to meet today's demands and expanded for tomorrow's requirements."

Statistical quality control as a moneysaving production tool was detailed by Stanley R. Rinehart, vice-president. Pointing out that the range of quality variation is directly related to cost, he noted that it is always possible to reduce the range by inspecting or culling out portions of the job, or by improving methods, facilities, paper, plates and ink. But these steps add to the cost of the final piece. "Savings resulting from elimination of inspection and rejects more than pay for the quality control program in the Du Pont plant," he said.

"It helps in estimating, planning and production, because all know the quality objective, which items are economically desirable, and which operations need improvement. It is in no way designed to take away or minimize the skills of any employees. For them it is a service tool for improving their products and craftsmanship."

Paper quality and availability was the topic assigned to John L. Kronenberg, lithographic paper division manager, S. D. Warren Co.

"The most conservative forecast is that consumption of printing paper in 1975 will be 77 per cent above the 1952 figure. This means an even greater commercial printing growth because of the trend toward multicolor jobs. So the market for the litho industry should be favorable.

"Since World War II, printing paper has frequently been in tight supply. In the face of extensive growth in other larger and more profitable segments of the paper industry's market, the printing paper segment has not shown profits to warrant huge expenditures for new mills. But indications are that the profit picture for printing paper mills has improved, and that the requisite expansion of mills will be undertaken to meet your demands in full."

"It is estimated that two or three big high-speed paper machines must be built each year to keep pace with rising printing paper demand. The fact that five new machines, in as many mills, will come into production by early 1958 indicates that the demand will be met."

George A. Mattson, executive director, Chicago Lithographers Association, outlined a lithographic supervisory development and conference program properly organized and conducted to go a long way toward enabling supervisors to reach their greatest potential as plant executives.

Research is the greatest contribution towards increasing productivity, reducing unnecessary chemical, mechanical and human waste, and expanding end use values and salability of litho products, said John F. Perrin, president of the Lithographic Technical Foundation. He stressed that part of the blame for low profits stems from failure to give research enough financial support "to keep us out in front of other processes."

The National Association of Photo-Lithographers presented this scroll to Leonard H. Knopf, president of Meyercord Co., Chicago, in gratitude for his enthusiastic and efficient work in the NAPL



Mr. Perrin pointed out that owners of more than 200 litho plants, who are always alert to research development and spend money on it and for training craftsmen, are high in the above average profit bracket.

It was Mr. Perrin's opinion that research should be done by a team of experienced research, financial, business, sales and production men.

Mr. Perrin highlighted the fact that at least ten of LTF's 80 research results over the past 32 years saved the industry more than the nearly \$1,500,000 invested in LTF's program.

He reported that LTF's simplified color chart for pressroom purposes had been revised to extend its use to art (engraving) departments. Another piece of advance information was that a nonblinding lacquer with greatly increased resistance to abrasion had been under laboratory study for several months and looked very promising. Due for announcement soon is a coating for presensitizing "your own plates of any size." Also coming this way is a new textile "which we believe will be as effective as molleton or paper" for paper dampening rollers.

James S. Wilkinson, lithographic consultant, saw Davidson, Multilith and other small presses as creating "a giant new segment of the printing industry." He summarized the advantages of such units as follows:

Nominal initial investment, economical operation, mechanical simplicity, ability to produce high quality work in very short time, serving a wide range of different needs, a variety of printing methods on the same machine in some instances, simple and quick makeready, and high running speeds resulting in a high percentage of productive hours for satisfying a higher percentage of customer needs.

Mr. Wilkinson spoke as moderator of a round table discussion. Serving with him were representatives of Miehle Printing Press & Manufacturing Co., American Type Founders, Davidson Corp., Princeton Polychrome Press, Addressograph-Multigraph Corp., J. J. Newberry Co., New Jersey Bell Telephone Co., Shell Oil Co. and the Offset Duplicator Review.

Chairing a panel on diazo-type presensitized plates was Hamilton C. Carson, editor of Modern Lithography. Panelmen represented Azoplate Corp., Minnesota Mining & Manufacturing Co., S. D. Warren Co., Lithoplate, Inc., Ozalid Corp., Remington Rand, and Lithographic Technical Foundation.

LTF's Michael Bruno reviewed litho plates in general and presensitized plates in particular. He reported that lacquers were being developed to lengthen diazo presensitized plate life, and forecasted that the time was coming when all plates would be presensitized.

Bernard S. Rosenstadt, Ardlee Service, Inc., led a round-table discussion of 17x



Associated Lithographers, Inc., Des Moines, Iowa, displayed its work at the Iowa Products Show lost year with three girls wearing lithographed skirts. They are (I. to r.) Kaye Cunningham, Kit Coffman and Carol Morris who has become Miss Universe. More girls will be there this year for surel

22 and larger presses by representatives of Harris-Seybold Co., Miehle Printing Press & Manufacturing Co., William Gegenheimer, Inc., and American Type Founders.

Dr. Walter Clark, Eastman Kodak Co., dealt with color correction in photo-mechanical reproduction. William H. Falconer, Eastman Kodak Stores, headed round-table treatment of preparatory processes including camera, correction, stripping and platemaking. Walter Conway of Walter Conway & Associates, gaveled a panel on copy preparation for offset reproduction and line art.

The Photon electronic machine, which sets type on film, was displayed in operation. W. W. Garth, president, Photon, Inc., pointed out that the matrix disc, weighing 2½ pounds, carried fonts and characters equalling a ton of hot metal matrices. Among other features demonstrated was straight text setting on the Flexowriter for feeding through the Photon to produce the typography on film. One Photon could handle the output of three Flexowriters, Mr. Garth claimed.

There was an all-day technical session led by Miehle's William J. Stevens. With him and Mr. Bruno on the answering side of this customary quiz were Joseph B. Medio, pressroom superintendent, Brett Lithographing Co.; A. P. Reynolds, printing-testing department, S. D. Warren Co.; Richard H. Scott, director of communication, Sinclair & Valentine Co., and Harold Potts, technical representative, graphic reproduction sales, sensitized goods sales division, Eastman Kodak Co.

Schuyler Van Bloem, Brown & Matthews, Inc., detailed the many factors involved in building a lithographic plant.

LTF Offers Audio Visual Aids on Press Problems

Latest entry in the series of audio visuals coming from Lithographic Technical Foundation is titled "Press Packing." It demonstrates the principles and problems involved in properly packing offset presses. The principles are clearly described and shown so that the operators, regardless of the type of press, will have at their command a thorough understanding of the practices they should follow in order to get maximum results.

AV No. 17 is fourth in the series on press operating and press problems. Sheet control will be in a later issue.

Each audio visual comes with recording and film strip, notes for auditors, data and instructions for the person acting as operator or instructor. Prices for LTF members are \$45 each or \$300 for ten; for nonmembers, \$65 or \$500, respectively. Further information, including a list of 17 topics, may be obtained from LTF at 131 East 39th St., New York 16, N.Y.

Winship Elected Brett President To Replace Late Charles W. Frazier

William M. Winship has been elected president of the Brett Lithographing Co., Inc., Long Island City, N.Y. He has been active in the lithographic field for many years and is presently a director and treasurer of the Lithographers National Assn.

Mr. Winship succeeds Charles W. Frazier who died recently at his home in Englewood, N.J., at 82 years of age. He was president of Brett for more than 50 years and was past president and treasurer of Lithographic Technical Foundation.

LNA Director Analyzes Trend Of Litho Sales and Profits

By Hal Allen Eastern Editor, The Inland Printer

Is the annual rate of lithographic sales increase flattening out? W. Floyd Maxwell, executive director of the Lithographers National Association, poses this question in his survey report of lithographic profits for 1955.

Net sales two years ago showed a strong uptrend. Last year's report disclosed a similar trend, but in somewhat less degree. The survey covering 1955 sales makes the upswing much less clear.

Two of the 236 reporting firms indicated sales below those of 1954, and 21 reported increases. But 213 checked the same sales bracket for both years. Here are Mr. Maxwell's comments:

"While these facts do not preclude the assumption that sales actually exceeded the 1954 level—and they almost assuredly did—they do raise a very definite question as to the rate of annual increase."

What might account for a flatteningout trend?

"It may well be," said Mr. Maxwell, "that the cumulative effects of the substantially increased costs of paper and other raw materials, steadily advancing wage costs, shorter hours, more paid holidays, longer paid vacations, increased health and welfare and other so-called fringe benefits (of which the lithographic

branch of the commercial printing industry seems to have had the firstest and mostest) are making themselves felt, both relatively as among processes and actually in customer resistance to increased costs and, therefore, selling prices." This pointed up a situation "which may importantly affect profit possibilities in this and later years."

Average net profit before taxes for the 236 firms was 6 per cent in 1944 and crept to 6.3 per cent in 1955. After taxes net made a similar slight gain from 3.3 to 3.5 per cent.

None of the larger companies expected profits this year to be much lower, but some 3.5 per cent of the smaller firms felt that they would be. About one-sixth of the total foresaw slightly lower net results. Some 80 per cent, large and small, replied "equal or better," and about 50 per cent predicted higher profits. Of the latter group, by far the largest number said only slightly higher, and more than one in eight of the 236 expected much higher end results. Said Mr. Maxwell:

"The five firms which felt that 1956 profits would be much lower than last year had in 1955 a 9.2 per cent average net before taxes. Thirty-nine, who guessed profits would be slightly lower, averaged pretax profits of 8.2 per cent. Seventy-six who said profits would be the same as last

year averaged 7.8 per cent pretax profits in 1955. Eighty-four, expecting slightly higher end results, averaged 5.2 per cent pretax profits last year. Average net before taxes in 1955 was only 3 per cent for 32 firms which estimated much higher profits this year.

Here Mr. Maxwell quoted Fortune magazine: "Executives who are least happy about the present are on the whole most optimistic for the future." Then he quoted from another source that "the average is the best of the worst and the worst of the best," and commented that "when you think of it that way, average performance isn't particularly meritorious."

Survey respondents, submitting no dollar figures, checked where they fitted in six sales volume brackets. Seventy-one plants in Group A, sales under \$500,000, reported much better profit position than 68 plants in Groups B and C, volume between \$500,000 and \$1,000,000.

Mr. Maxwell asked why. He suggested that "in Group A plants owner-management or members of their families undoubtedly perform a substantial part of actual production. Group B and C plants must employ a larger percentage of their factory labor.

Do labor contract provisions, common in the industry, bear with unusual weight on B and C plants as compared with plants with sales of over \$1-million? Are B and C plants primarily engaged in the black and white field in markets largely local? Generally speaking, do the larger plants command better management, re-

(Turn to page 61)

Pittsburgh Lithographers See Platemaking on TV

Closed circuit television screening of lithographic platemaking techniques came to Carnegie Institute of Technology campus on October 5-6. More than 600 craftsmen from the Tri-State area around Pittsburgh, assembled in Thistle Hall, saw eight Lithographic Technical Foundation research men demonstrating and voicing their technical know-how in Carnegie laboratories several hundred yards away. Action coming alive on 25 television screens covered albumin, deep-etch and bimetal

platemaking, press wash-ups, stripping, contact printing, paper troubles, and other problems.

The forum was sponsored by Printing Industry of Pittsburgh, Inc., in coöperation with Carnegie, Pittsburgh Club of Printing House Craftsmen, and Local 24, Amalgamated Lithographers of America. Thomas H. McCabe, Jr., PIP executive director, rated the large attendance as stemming from the desire of local firms to keep step with litho technological devel-

opments, and from their awareness of the need for greater production to meet the increasing demands for printing from the local buyers.

Next LTF televised forum is timed for Nov. 30 and Dec. 1 at Manhattan Center in New York City. Sponsoring this one, which will use a theater-size screen, slide films and colored movies, are Metropolitan Lithographers Association, Inc. and Local No. 1, Amalgamated Lithographers of America.

Left: Frank Preucil of LTF, Chicago, does his stuff in front of cameras at Pittsburgh Technical Forum. Leo N. Carmain, Herbick & Held Printing Co., general chairmon of forum, issues last minute instructions to steering committee. Surrounding Mr. Carmain, left to right, are Michael H. Bruno, LTF research director, Wade E. Griswold, LTF executive director; Glen E. Cleeton, dean of Carnegie's School of Printing Management; Thomas H. McCabe, Jr.,

executive director of Printing Industry of Pittsburgh, sponsors of forum; Mr. Carmain; M. R. McGrew, type director, Ketchum, MacLeod & Grove, and president of Pittsburgh Club of Printing House Craftsmen; Theodore T. Meyers, president Local 24, Amalgamated Lithographers of America; Keneth R. Burchard, assistant dean of Carnegie Tech School of Printing Management. Offset platemaking closed circuit to screening was held Oct. 5-6



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The four-color reproduction on the reverse side of this page was lithographed using 3M Brand Plates on a Miehle two-color offset press by The Lund Press, Inc., Minneapolis, M





Lithographers National Association promotion committee sparks early start of the 7th Annual Lithographing Awards Competition and Exhibit. Seated (f. to r.) are LNA executive committee representative L. E. Oswald, F. Schmidt Co.; promotion committee chairman Edward J. Chalifoux, Photopress, Inc., and Thomas P. Mahoney, Regensteiner Corp. Standing are LNA promotion director, Herbert W. Morse; R. C. Reinhardt, Philipp Lithographing Co.; LNA western manager Gordon C. Hall; U. Gordon Colson, U. O. Colson Co.; Edward Peterson, Forbes Lithograph Manufacturing Co.; John Lutgen, Stewart-Simmons Co.

flected in more efficient operations? Are their markets, more largely color and national rather than local, less competitive?

"Does the relatively poor profit position of B and C plants, with a higher percentage of small, single-color equipment, result in important degree from competition with the larger multicolor presses of the larger plants? To put it another way, is there an uneconomic size of lithographic plant somewhere between the very small and the moderately larger plant?"

The survey report closes with another quotation, this time from a printing press manufacturer's house organ:

"The newer presses should make bigger profits for their owners through higher production. Those operating obsolete presses, because of low production are actually paying for new presses through loss of profit and not having the privilege of owning them. Being busy isn't the whole answer. A busy plant may show little profit at the end of the year. 'Busy bees make lots of honey, but busy plants don't always make lots of money'—unless they're properly equipped."

Japan Display for Litho Winners

Twelve winning entries in the Sixth Lithographic Awards Competition, sponsored by the Lithographers National Association, are due for display in Japan's leading department stores. They will be shown as part of the International Poster Exhibit which J. Walter Thompson Co., advertising agency, and the Dentsu Advertising Agency of Japan are sponsoring for the first time to promote interest in commercial art and printing.

LNA Awards Contest and Exhibit Deadline Jan. 18

Jan. 18 is the deadline for entries in the Seventh Annual Awards Competition and Exhibit sponsored by Lithographers National Association. Announcement brochures and entry blanks were due for mailing by mid-November, two months earlier than in past years. The schedule was short-timed in order to conclude the competition in time to ready exhibit panels for display at LNA's 52nd annual convention April 1-3 at the Greenbrier, White Sulphur Springs, W.Va.

Panels showing new lithographic applications and production techniques will be displayed for the first time.

Six winners will be selected in each of 45 classifications of offset lithography produced this year. A new category, recognizing material that has come into prominence in recent years, covers specialties and novelties such as playing cards, book matches, cloth books and covers, premiums, lithography on textiles, vinyls, plastics, acetates, etc.

Judges will rate each entry for technical quality of reproduction, excellence of design, art, typography and general composition, and effectiveness of the piece for its intended purpose. Award certificates will go to both creators and producers. Judging will take place during the week of Jan. 28 in Chicago. Grant-Jacoby, Inc., Chicago, is designing the awards catalog and all other competition material.

The entry door is open to all lithographers, advertisers, agencies and designers. Entry blanks can be obtained by writing to the LNA Awards Competition, Lithographers National Association, 420 Lexington Ave., New York 17, or 127 N. Dearborn St., Chicago.

New Collective Bargaining Manual Issued by LNA Labor Relations

A versatile and comprehensive tool for the exclusive use of members of the Lithographers National Association in providing a more effective basis for contract negotiations has been issued by the LNA Industrial Relations Department, under the supervision of Labor Relations Director Quentin O. Young.

The LNA Collective Bargaining Manual, containing a summary of contracts negotiated in 39 lithographic areas in the United States, will fill the need of many plants for factual data in determining the terms and conditions of employment in this period of more complex economic relationships, Mr. Young said.

While primarily designed as an aid to members engaged in labor contract negotiations, the manual has much broader application. Affording a ready reference to establish working conditions in the major lithographic areas, its use extends over a wide range of the industry.

The maximum use of all available data, according to Mr. Young, guarantees a factual basis for more efficient and advantageous collective bargaining. It is the intention of the Industrial Relations Department to keep the data dynamic and current, provide periodic revisions of the manual and to expand the areas covered.

Liberal use of charts make the contents readily accessible and comprehensible.

THE PRESSROOM

By George M. Halpern

Questions will be answered by mail if accompanied by a stamped envelope.

Answers will be kept confidential upon request.

Ink 'Bargains' May Be Very Costly in Final Analysis

- Substitute inks are not equal, can create production and quality problems
- Front office purchasing agents would do well to consult with pressmen
- When ink inventories are low, pressroom foreman should write reorders

It is a common practice of the well-run printing plant to have a supply on hand of those inks which are most commonly used. The method of keeping an inventory and of reordering supplies, or placing orders for new pressroom supplies, depends upon the size and type of operation.

Shortages of supplies in the small plant are usually called to the attention of the owner by the pressman. This is a rather haphazard system, since under pressure of increased production, small details are often overlooked. Most pressmen at one time or another have witnessed chaotic scenes because certain basic inks were not available when required. Imagine what the ink manufacturer must think of plant management when he receives an emergency call for a pound of bond ink.

In larger plants, it is the responsibility of the pressroom foreman to keep a constant inventory of ink supplies. When he finds that supplies are low, or in the course of mapping out future press schedules with the plant superintendent or production manager, it becomes clear that special ink supplies will be needed to meet production schedules. It is his duty to place an order in writing with the front office for these supplies.

The ordering is done by the front office. This writer believes that the person doing the ordering of ink supplies does not possess the technical background of the pressman when it comes to such matters as the number of times the ink has been ground, the substitution of one vehicle for another, and the addition or deletion of driers and compounds, etc., and the effect that these items have on running a job.

A great deal of competition exists among ink manufacturers in vying for customers. The two factors that ink manufacturers stress are the quality of their particular ink and the service their company can render the customer. A salesman, on approaching a purchasing agent of a printing company, will justifiably claim that the ink his company makes is de-

signed to do the job as efficiently as the ink requested by the pressroom.

His additional sales pitch may include the fact that his company is in a position to render a somewhat better service, or perhaps that his price is a bit lower than a competitor's. Let us face the fact that in a time of increased costs any appreciable savings will certainly make an impression with the front office. As a result of being "sold," the front office will gamble, wittingly or not, that the substitutions will not affect the quality of the end product. The pressman has no time to experiment with the new ink, and is forced to run the job with the materials supplied. He can render his decision as to the acceptability of the ink only after the job has been completed.

It has been the unfortunate experience of many, that when one ink was substituted for another (although both were created for the same purpose), under similar operating conditions they gave different results. A pressman chooses a specific ink because he knows from experience what results he may expect. Just a slight change of one factor in the manufacture of it can create unforeseen problems.

For example, the pressman has ordered a specific ink for the running of halftones. The front office provided him with a substitute ink. In running the job, the pressman found that his halftones filled up very rapidly, and he was compelled to stop the press frequently to wash out the screens. Evidently, the front office had failed to check the substitute ink to determine whether it was ground as finely as the ink ordered by the pressman. Result: larger pigment particles filled in the screen. The press time lost was of greater value than any savings resulting from the "good buy."

Pressmen today are recognized as highly skilled technicians. They are paid accordingly. Management should make greater use of their skill and technical background. Closer coöperation between the purchasing division and the pressroom can pay off in increased production and quality of performance. This is especially true when ordering special inks for particular jobs.

Special inks are formulated to do special jobs under specified conditions. It

Sam Nusplinger, G. M. Basford Co. group account manager, indicates Alley Oop and his dinosaur press featuring "new look" ad campaign for R. Hoe & Co., New York City. Others (l. to r.) are Herbert Harris, Basford copywriter; George Devyr, Hoe ad manager; Don Sweet, agency account executive; Robert K. Haskell, Hoe sales administration manager; Francis Pataky, agency executive art director



must be understood that under no circumstances should these special inks be used for jobs other than those for which they were ordered. It is easily possible for them to fail to produce the desired results.

Trained production men and skilled pressmen have found that it seldom pays to buy a "cheap" ink as a means for cutting production costs. Cheap inks are never too thoroughly ground in the ink mill. Inks which are not milled sufficiently will be gritty and can easily result in damage to the printing plate.

It is far more expensive to buy a new set of plates for a job than it is to invest a few pennies more per pound on a better grade of ink. The better the ink quality, the fewer the problems to be encountered.

Failure to meet required delivery deadlines may be directly traced to the slower drying of a cheap ink. Increased efficiency is the best way to cut production costs and is the result of skilled technicians, quality materials, good operating equipment, and a high degree of coöperation between plant and office.

Cylinder Brush Settings Can Affect Register

Q.—I seem to be having difficulty in getting large sheets to register accurately on a cylinder press which is only two years old. I had the mechanic in two months ago, and he adjusted the feedboard to the proper height, checked the register rack, and left the press in perfect register. I am enclosing samples of my last job which has been run through the press twice for register. Notice that there are at least three points difference in the actual printing. What do you think could have gone wrong?

A.—In view of the fact that the press was adjusted to perfection so recently, a minor adjustment was probably made to the press which affected the register. Off-hand, I'd say check the cylinder brush. Large sheets are oftentimes thrown out of register when the brush is set too tightly against the cylinder.

You can check the tension quite easily by placing 10-inch long strips of paper behind the brushes at various points. By pulling on the strips, you can feel whether or not the strips are held too tightly against the cylinder, or too loosely.

If the strips are too loose, the register will not be greatly affected, but a smear may occur. If the strips are too tight, it is likely that the sheet is pulled from the grippers sufficiently to take it out of register. In either case, loosen the adjusting screws and reset the brush so that it holds the sheet gently to the cylinder.

Pressroom Dust and Vapor

Q.—For about a year we have had an automatic cylinder press with an air vacuum pump requiring lots of oil. Today, a beam of sunlight fell across the blower outlets on the feed table end revealing a smoky appearance. When the sunlight does not fall on this spot, the smoky appearance is not noticeable. Is this obviously oil-filled vapor bad for the lungs of the pressman if inhaled continually?

A.—The smoky appearance is probably due to dust in the pressroom. Normally, the eye does not see such dust. A beam of light falling on an area with much dust in its vicinity will reveal the dust to the human eye. What you actual-

ly saw are dust particles which remain suspended in the air at all times.

The oil spray, if it existed, consists of particles much heavier than the particles of dust. An oil film would therefore be deposited on the nearest surface—the stock or press, which you haven't noticed. Dust in the air about us is not normally harmful. Should you feel that your particular plant operation is adding harmful ingredients to the dust already in suspension around you, you may have a sample analyzed by competent chemists.

Wax No-Offset Spray

Q.—We believe there is on the market a no-offset spray material which is of wax consistency rather than the ordinary liquid or powder. We understand that this waxy material does not have the tendency to spread through the air and to parts of equipment, whereas the other types do. We will very much appreciate securing information, and any other details regarding it.

A.—This wax type of solution can be used for color process work, will not clog the spraying machine, is harmless to press and operators, has no chemical reaction on any stock, is a very fine, light almost invisible mist, is colorless, and can be used with or without heaters. It is nonflammable. The manufacturer believes his product will prevent static electricity after printing. Some dust particles will settle on machine parts, but not in quantities found from the use of other types of spray products.

Gauge Prevents Lockup Distortion

A simple gauge for controlling lockup pressures has been developed by the Printing, Packaging and Allied Trades Research Association and should be available commercially in the near future.

A visible aid, the gauge, when attached to the crossbar of a chase, gives a magnified picture of the actual distortion of the crossbar. Adjustment of locking up pressure is simply continued until no distortion is indicated. The gauge can be used on the stone or on the press and is said to give fast lockup and minimum pressure.

Yellow Ink Additive Turns Pressmen "Red"

Complaints by some Washington printing pressmen that something about their work was spoiling their desire to drink set doctors on the trail of a new anti-alcoholism drug.

Two physicians assumed the role of medical detectives to track down the chemical offender—and emerged with a likely drug for aiding alcoholics.

They found that the unwanted something about the pressmen's work was a chemical added to their yellow ink to keep it from skinning.

The chemical served its purpose well, but it also made workers who were exposed to it turn red and sick when they stopped off for even a short one before going home. Even a glass of beer brought flushes to their faces, and the more they drank the sicker they became.

The tale was unfolded in a report by the doctors in the September issue of Medical Annals, publication of the District Medical Society.

The doctors went to work at the request of a large Washington printing company.

The affected pressmen at the firm of Judd & Detweiler, Inc., reported they could do their best drinking only during the summer, when windows were open and the exhaust fans were on full blast.

By the time the doctors started working, the report noted, most of the workers on the second floor had, unwillingly, stopped drinking because of its "unpleasant" effects.

By a process of elimination, the two doctors latched on to the offending agent they identified as N-butyraldoxime.

Their best clue came, they reported, when they learned that the amount of the chemical used to prevent a "skin" formation on the open containers of yellow ink had been stepped up to 2½ times its former amount—just about the time the men began to notice that whisky and beer weren't agreeing with them.

Using five volunteers, and exposing them to fumes of the chemical, the doctors reported they clinched their case against N-butyraldoxime—which has since been replaced at the printing plant by a less obnoxious anti-scum chemical.

That would be the end of the story, except that the doctors think N-butyral-doxime may be even better than present, more violent, anti-drink pills. To that end, they said, a lot more research remains.

Plastic Grocery Bags for Inks

The little plastic bags that groceries come in can be used in the pressroom. A can of ink that is going to be stored can be put into the plastic bag and held closed with a rubber band. This keeps the ink more airtight to prevent skinning, and the label can be read through the plastic.

LESSON OF MONTH

SPECIMEN REVIEW

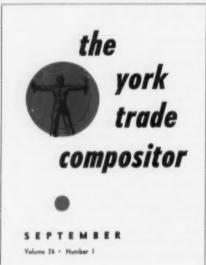
By J. L. FRAZIER

the york trade compositor



Volume 26 · Number

Ordinarily, we have but praise for Phil Mann's houseorgan, now we're about to lead at it with our left. Last to insist on balance through centering of all lines and elements, we insist-first, last, and always-that there be balance. Without it in typographical display, the penalty is double-barreled. Without balance, stability and order, appearance is not only unpleasing esthetically, but the eye is led hesistantly, uncertainly, and disturbingly along its way like the walk of a drunken man in his. If what we print is to be read with certainty, that will not do. In the cover above a line dividing design laterally would disclose more weight (printed surface) at right, so design is overbalanced there. In the reset below, weight is consonant on both sides. Appearance is improved, not only because of this but of improved contour, e.g., outline



Typography to Suggest Speed

WETMORE & COMPANY, Houston, Texas.—Regardless of its kind—business cards for insurance agents or annual reports filled with four-color process illustrations, like that of Houston Lighting & Power Co.—your work is top-grade. With LeRoy Barfuss, your art director, you may be sure whatever is turned out of his design will be modern and, what is more, have power. The Trans-Texas Airways poster "Take to the Air," on which that line near left and top of the 14- by 22-inch sheet symbolically reads upward instead of from left to right, is especially impressive. There is a narrow white outer margin of white paper, but the

that, not to mention the birds in flight, most properly and effectively suggests high speed. Another outstanding item is the double or French-style folder, "Debating the Bait." Front of the folded piece-71/2 inches square, not counting the short fold from right, which forget for the nonce-carries a halftone illustration, background black, showing three men in discussion, debating the bait. Below, in large and bold condensed block lettering, all caps, the title of one line appears in reverse color, the one word "bait" showing yellow. Against the black, both picture and title are highly effective, indeed white against black seems more powerful than black against white, or does the con-

NIGHT AND DAY



Printing offers a combination of economy, permanence, perauasiveness, and flexibility unmatched by any other means of communication. We do our part in printing—the typesetting—to the very best of our ability to help keep printing in the lead. May we serve you, night or day?



Dahl & Curry
TYPOGRAPHERS AND ELECTROTYPERS

506 FIFTH AVENUE SOUTH + PHONE FEDERAL 9.1491 + MINNEAPOLIS 15, MINNESOTA

Scripts

SWING BOLD
BRUSH
STYLESCRIPT
PARK AVENUE
BANK SCRIPT
COMMERCIAL SCRIPT

● Today's impossible task: to use typesetting promised for yesterday but which will not be delivered until tomorrow. We realize that, too, so our constant aim is "delivery on time, every time." Our "batting average" is so high that some of our appreciative customer-friends seem to think we never slip—and that makes us try all the harder for delivery perfection! Day and night service

— Dahl & Curry

TYPOGRAPHERS AND ELECTROTYPERS

Service and facilities are emphasized in the current series of blotters issued by Minneapolis typographic house. Types are shown or named on some—as in the second—mainly, it would seem, as eye catchers—more or less simply. Mention need scarcely be made of the increased effectiveness given the main line of the first blotter by use of black for "night" and the bright hue for "day." Second color on both of the originals is red

background is black, art and lettering show in either white (paper) or one of two colors, red or bright green. Dominant design element is a reversed color silhouette illustration of three carrier pigeons (we believe) flying in formation like planes. Birds are largely white, but a few small spots of the colors avoid flatness of effect. Brief copy appears in slanting poster-type lettering, white or one of the colors, above and below picture. Except for the line reading upwards, all lettering is decidedly on the slant and

trast from reversal of custom do the trick? Of course the object of your copy on page three, started off with full-color but small illustration of a fisherman's fly, is to boost creative printing by Wetmore as the best bait for catching customers. We don't endorse setting as much type as appears on page three with the left side of the block irregular. The freedom of effect is overbalanced by effect of slowing down the reading. Flush left and ragged right style is less objectionable. Presswork is excellent.

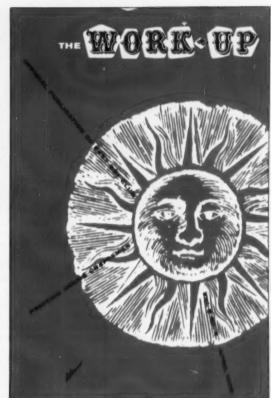
Items submitted for review must be sent flat, not rolled or folded. Replies cannot be made by mail

Economical Promotion

A. M. PHILLIPS, Watertown, New York.—Considering that you do not spend a lot on your 71/4 - by 101/2 inch circulars used as enclosures, which go sometimes with letters, in Baronial size envelopes, we think you do a whale of a self-advertising job. Of the several you submit, we are impressed by the one titled, "An Ever-Widening Circle of Users," especially as something to write about and as suggestions to others. Almost all the top half of the sheet is occupied by a reverse-color illustration, near the top of which the title (quoted) appears in sans serif caps. In about the center of the space below, there's a splash the complete sentence. "An ever widening circle of users," it goes, "from the prospect, to the occasional customer, and, finally, the account." You do good presswork.

Uncommon Colors Score

JOHN GUY of Durban, Natal, South Africa.-As we have said before, we admire the work you plan and design, mostly for the Natal Building Society, also for being its advertising manager. You may hold your head high. While skill in one of these directions is a fine introduction to skill in the other, the dual talent seems in vour case developed to quite a rare degree. Of course, we have no errors to point out in the work most recently submitted. Two angles contributing to its excellence are important enough to bring to the attention of other and, especially, less able readers. There is no merit in making anything that is printedexcept professional cards or type itself small. There is always merit in bigness. So, type and lettering in what you do is, properly, not restrained. Of course, and properly, too, unimportant elements of copy are not oversize, but what is important is so much larger



Not officially the "Sunshine State," California gets its share, tells the world about it. As the "centerpiece" of cover from bulletin of East Bay Club of Printing House Craftsmen, by William Adamo, Ol' Sol arrests the eye, does the job, and must certainly have won accordades of natives. In yellow color, one all but feels the tan coming on

Niagara Frontier Advertisers Association Third Annual Advertising Competition—1955 Campaigns First Place AWARDED TO in recognition of THE EXCELLENCE OF THEIR ADVERTISING and the merits of the results achieved Class Date Da

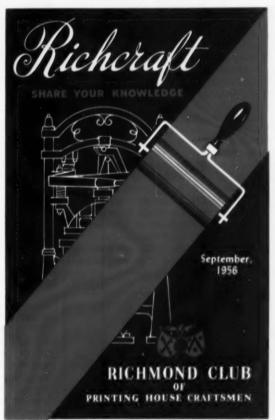
Regardless of who turns out the good ones, designers of diplomas, and certificates generally, keep to the "right," stay conservative because they know such are framed and kept for years. Not what is newest (and may not last) but what is as near permanent as typography may be continues invariable. In this certificate, Emil Georg Sahlin, Buffalo, saw to it that every requirement was met

suggesting a fish in water-we suppose under surface—with eddies circling about. Our only point of adverse criticism is that the plate is printed in an orange of rather dull tone. It seems to us that it would be more effective, certainly more realistic, if the plate were printed in blue. As we recall, the old river swimming hole where we thrashed about as a boy became quite discolored, and was sometimes a dull, dirty green during "dog days," but never orange. The effect, with blue, would be prettier, too. We like the copy following and a continuation of the heading, so are impelled to quote

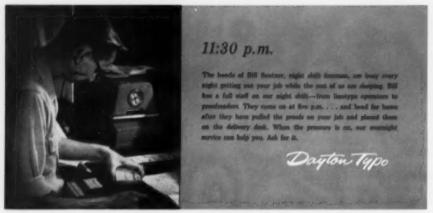
comparatively that it is bound to have real power. The other point that others should give attention to is color. You dodge hues which are commonly seen; you surprise us, in fact, with the potentialities of toned grays. Finally, the presswork is up to the standard of the best that is done anywhere within our knowledge. Generally, South African pressmen do better than compositors.

Top Work From "Down Under"

McLaren & Company, Melbourne, Australia.—The brochure, "Peg a Stake in Australia," you did for the English, Scottish & Australian Bank of



Also worthy of acclaim is the bulletin cover reproduced in about half size above. The original, also 6 by 9 inches, is printed in rather strong green, yellow, and black, date in latter over green



This is second of series of 10- by 4½-inch mailing cards by Dayton (Ohio) Typographic Service to be shown here. Comparison with first on page 70 of July issue will disclose that, while all are of identical design, each features a different facet of company's operations. Color on all is the same, a suitable medium green on white stock

your city measures up to the standards of the very best work of its kind-in content as well as production. With respect to the former, our impression is that your great land seems to afford the ultimate in opportunity to industries, companies, and men. Layout of the pages is in the most modern manner, consonant with good sense, with illustrations-made most of by bleeding off. Graphs and type are interestingly and impressively arranged. Power is evident within the best order, which means illustrations and other elements are not placed disturbingly or even aslant. The latter, to get away from you for the nonce, is more often than otherwise the manner of those unable to achieve the modern and forceful effect within order. Of course, we do not decry occasional off-thehorizontal positioning of plates, see merit in those of odd shape-again on occasion and as a contrast-but too much of a good thing often becomes a bad thing. One of the best features of your page layout is the liberal and proportionate amount of white space, evident where it emphasizes other features most, always in good balance. Of the many illustrations, all but two are in full process color. In the printing of these big plates, the skill of your pressroom craftsmen is manifest. The map across the 17- by 11inch spread is really outstanding. We can not imagine the small wording more sharply printed by any method. The item-of 32 pages and cover-is given increased "body" through use of the extra-heavy coated stock. Many here consider Australia and South Africa far off places, which they are, and lacking facilities available in the United States and England, which we know isn't the case. Printers like yourselves do much to prove that final contention.



"Small and neat, and hard to beat," striking, too. Business card by LeRoy Barfuss, of Wetmore & Company, progressive creative printing house at Houston

When White Space Is Liability

THE READ PRESS, Brisbane, Australia.— The items you submit, for the most part big and important work, are of very good grade. Careful planning is evident, general design, usually quite modern, and layout are sound. Presswork, highly important on work

such as are essentially used on brochures, school annuals, and annual reports, the best inks and the tackiest, densest blacks only should be tolerated. We have two suggestions to offer which, if followed, will improve even your work. First involves typography, especially with respect to size and length of lines. On several items we find more white space-in margins and elsewhere-than necessary when, with less and not too little, the next larger size of type could well have been used. This is especially important when the type sizes would definitely be designated as small. Lines of text are too long in some books, an example being the forward pages of the annual report of Southern Electric Authority of Queensland. Examiners into reading habits some years ago determined that a line the length of an alphabet and a half (of lower-case) was ideal. That, of course, properly applies to all sizes because the larger the type the longer the line may be which can be followed with comfort and assurance. Text of the pages referred to should be of two columns. As to type—another suggestion. Almost always headings are of too modest size. In a larger size, just a bit larger,





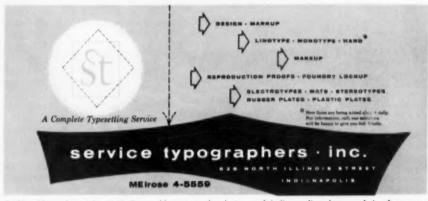
Warwick Typographers, St. Louis, are quick to announce stocking of latest types and, whatever the format, announcements show styles suitably and effectively—constitute upper-class lessons in layout. First is front of 6-page folder of 9½- by 4-inch pages; second is middle page of center spread. Coior on antique white paper of original is a soft, dull, and rather cool yellow-orange. Look to right and see two other pages from the folder

involving numerous halftone illustrations, is excellent. Contributing to the quality of the printing are very good papers and inks. Your blacks cover and glisten. Unlike yourselves, too many printers don't appreciate the great difference in quality that the little difference in cost between cheap and the best inks will effect. On fine coated papers

"color" in the page would be improved, and the sense of the copy more quickly grasped at a glance. Your commercial artist is behind the times, his lettering definitely old-fashioned. Lettering of commercial artists doesn't match that of type designers, so about the only excuse for hand-lettering is to fit unusual or tight places, and, with distortion cameras and photolettering outfits now available, that excuse doesn't hold water. Compare Brush Script and the very new Murray Hill types with the lettering on front of travel folders for Heron, Lindeman and Magnetic islands and you'll see a vast difference in grace and styling.

Stunt Promotes Key Men

AMSTERDAM PRESS, Detroit, Michigan .-Your 24-page self-covered 81/2 - by 51/2 -inch offset-printed booklet represents about as interesting and effective a way of spotlighting personnel and equipment, and through them service, as we have seen in the promotion of any printer. The front cover features a line illustration of a couple of young boys watching a ball game "for free" through a knot-hole in a board fence. Above the fence, the line "Play Ball" in a relatively large size appears in lettering outlined in one color and filled in with another. Completing the design, there's a small card tacked onto the fence at a point near the lower left-hand corner of the page; the card bears joined capitals "A" and "P." One could get the idea the booklet contains a survey of the prospects for the baseball season issued by the Asso-



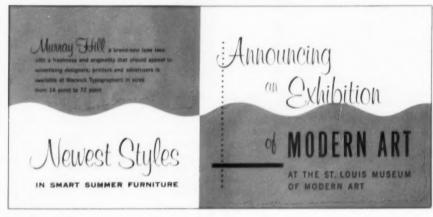
Striking blotter layout by G. H. Petty, able typographer-designer of Indianapolis, whose work is often reproduced in this department, and with good reason. Color on the white coated side of paper is a pleasing green hue

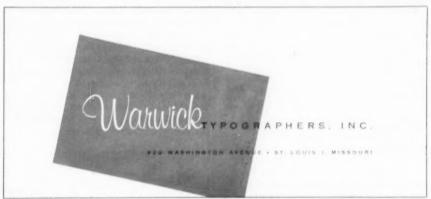
outlined halftones. Needless to say, "Amsterdam Press" and not "Detroit" appears in the lettering across each shirt front. Heads are of key members of the Amsterdam staff, and are named in a small block of not too small type in the skyline near the upper right-hand corner of the right-hand page. On the following spread, and near upper left corner under the head, "and here's our

expect. In handling the text about each department on left-hand pages, you were rather "behind the 8-ball." There is more white space than desirable, but to make the text too large would, of course, detract from other features. We'd settle with you if you used type just one size larger, adequately as line spaced, which would not only balance white and printed areas better but would not allow type to overpower other elements.

Some Points on Proportion

BROTHER PAUL LANDIS of Paterson, New Jersey.-Even though we are impressed by the brochure "Bulletin of Information" which in word and picture tells just what the Don Bosco Technical High School is like and what is accomplished, we have two suggestions for betterment. Cover is started off exceptionally well with illustration of the building in color across the top. The title beneath is quite large enough for practical purposes, e.g., for reading and catching the eye at a reasonable distance. However, the advantages of good proportion should be embraced wherever possible. The two lines are rather too small in relation to the illustration and, particularly, to the size of the page, 81/2 by 11 inches. Punch, within limits, of course, is also desirable; the title should exert a stronger demand on attention. Another point: The word "Bulletin" in 36-point Brush occupies the first line of the title, "of Information" in 18-point sans serif caps the second. There is no good reason for giving "Bulletin" such dominant emphasis as to encourage one to disregard the second line, not only much smaller but lighter in tone. It's important for a reader to know at a glance what the bulletin is about. Therefore, the complete title should be in the same size and style of type. Even then, there





Top panel above is from left-hand inside page of the impressive Warwick folder; lower one is of page at end of sheet on outside which is folded (from right) under front leaf. Back of item when closed is left blank

ciated Press. Even so, what red-blooded American business man will not turn inside? There, across the spread of two opening pages (and under the headline, "Here's the team ready to go to bat for you!") a "team" of sixteen uniformed "players" is pictured seated in a row on the bench. All the illustration is in line except the proportionately large heads of members of the Amsterdam team. Heads are printed from

pitch . . ." eight round halftones illustrate. The lettering beneath in each case names what you offer, from "Sales and Service" on through to "Finishing Department." On following spreads, these departments and facilities are individually written up and pictured. While page layouts are quite satisfactory, and some are rather impressive, typographic styling isn't top-grade. Display types are not in some cases as new as we'd



Original business card by Acorn Press & Book Shop, Oak Park, Illinois, reflects real class. Striking layout is sound, type is decidedly suitable, and celors black and gray-blue on gray—provide proper restraint



The First Book of Moses, called GENESIS

Chapter I

1) the beginning God created the heaven and the earth. And the earth was without form, and boid; and darkness was upon the face of the deep. And the Spirit of God moved upon the face of the waters. And God said, Let there be light; and there was light. And God saw the light, that it was good: and God divided the light from the darkness. And God called the light Day and the darkness he called Right. And the evening and the morning were the first day. And God said, Let there be a firmament in the midst of the waters, and let it divide the waters from the waters. And God made the firmament, and divided the waters which were under the firmament from the waters which were above the firmament: and it was so. And Bod called the firmament Beaven. And the evening and the morning were the second day. And God said, Let the waters under the heaven be gathered together unto one place, and let the dry land appear: and it was so. And God called the dry land Earth; and the gathering together of the waters called he Seas: and God

saw that it was good. And God said, Let the earth bring forth grass, the herb yielding seed, and the fruit tree pielding fruit after his kind, whose seed is in itself, upon the earth: and it was so. And the earth brought forth grass, and herb yielding seed after his kind, and the tree vielding fruit, whose seed was in itself, after his kind; and God saw that it was good. And the evening and the morning were the third day. And God said, Let there be lights in the firmament of the heaven, to divide the day from the night; and let them be for signs, and for seasons, and for days, and years. And let them be for lights in the firmament of the heaven to give light upon the earth: and it was so. And God made two great lights; the greater light to rule the day, and the lesser light to rule the night: he made the stars also. And God set them in the firmament of the heaven to give light upon the earth. And to rule over the day, and over the night, and to divide the light from the darkness: and God saw that it was good. And the evening and the morning were the fourth day. And

The late Richard N. McArthur of Higgins-McArthur Company at Atlanta, is one master printer who is also a master craftsman. He gets into almost everything, too, promising to benefit the business or craft of printing. Above is the front of a 10- by 13-inch signature of four pages which he produced for representation in the Book of Books International Project. Printers in 20 nations are providing pages of Genesis in their respective languages, with typography of their own preference. Sets of the varied designs in 1,500 fine cases will be exhibited all over the world. First three chapters of Genesis are completed on page three of signature above which is beautifully printed in black and red on heavy-weight Strathmore Alexandra Japan. Fourth page, "Notes," explains project, initiated to commemorate the 500th anniversory of Gutenberg's 42-line Bible, credits Raymond F. DaBoll for head-band, identifies the type styles employed as 18-point leaded Goudytext and harmonious Lombardic initial letters

could be adverse criticism because the question which should, as a rule, determine top display is not answered. The question is "What?" In other words if the copy "Don Bosco Technical High School" isn't made the big display and "Bulletin of Informa-

Ed O'Brien

1438 YORK STREET

DENVER & COLORADO

Florido 3.7377

How just about the most that can be made of space on small business card is demonstrated by one from Freddy Pannebaker, lithographer, Denver, reproduced above

tion" subordinated, the name of the school should be tied in displaywise with "Bulletin of Information." Again, to the two lines as set, the Brush in upper- and lower-case is thin of form, the sans serif in caps only is comparatively wide. In the sizes employed, shape harmony is violated-rather mildly, it is true. The position of this two-line title midway between the picture and group naming the school and giving its address (at bottom) violates proportion, which means also a pleasing variation to avoid monotony. The title should be higher. Inside pages, featured by large halftones illustrating school shop scenes, are exceptionally good. For a change we'd like to point out the merits of other items you have submitted, but space doesn't now permit. As head man of the school's printing plant, you seem to be doing a grand job.

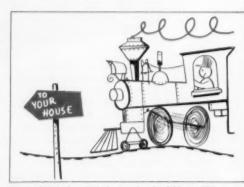
On Proportion and Spacing

THE BRITISH TRADE ALLIANCE of London, England.—The best thing about the booklet, "The Challenge to the Printing Industry," is the color effect of the cover, printing being in a dull violet against a printed background-plate for which is reversed to highlight illustration of a mailed fist-of a much lighter and grayish tone of the same hue. It is a good combination and different. Otherwise, the cover is rather nondescript. The brush stroke lettering doesn't appear to have been done by a professional. It's awkward and rough of line, and is quite too big and bold for the page to be consistent with the chaste and dignified-yes, delicatetitle page set mostly in comparatively small sizes of Bodoni and Bodoni Book. We realize that the violet color in which lettering and illustration on the cover are printed would show less effectively if the lettering were



Business card of definitely modern layout, full of character, and loaded with punch, BUT we still do not endorse starting proper nouns with lower-case letters

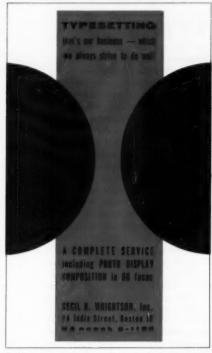
materially weaker; in fact, some colors scarcely show in very small type, but we're not suggesting going that far. Lettering is thick enough that it could be small enough to obviate the too coarse effect and allow for more white space around it and still provide the full value of the color. On the inside, the first violation of good printing is in placing the short (shallow) contents group in the vertical center, thus violating proportion, antithesis of monotony, and shape harmony; the group is wider than it is high in contrast with proportions of the paper page. It would help further if the measure were shorter. Then, fewer leaders would be required between titles of chapters and page numbers at right end of line. In advertising, and especially if large type is used, extra space between the paragraphs is often very desirable. In the running text, however, no more than one point extra should appear, preferably nothing extra at all.



Front of 5½- by 4¼-inch French-style folder, 1955 Christmas greeting of Oscar D. Barnhart, Flint, Michigan. Illustration is completed on center spread at right

Worthy Promotion Angle Here

GRUBB & PETERSON, Champaign, Illinois.
—Your 12-page booklet—uncommon page size of 11½ by 7 inches—is as impressive as it could possibly be except, perhaps, unless a separate cover of different and sensibly colored stock had been used. Two features demand mention. First, there is the very liberal amount of white space around type on all pages. You had space to make the type larger, but who would require it larger, especially since the effect of the white space is to make what you use seem larger than it



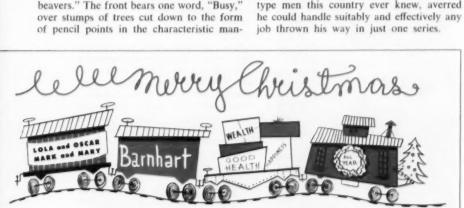
Striking use of geometric forms is demonstrated by this government-size post card. More to the credit of Frank Lightbown, our suspect as designer, use is sound, purposeful. Softer, weaker colors compensate for extent and weight of "decorators." Wrightson folks avoid black whenever possible, meaning often

is? Other readers should remember that. Second and a more important feature demanding mention is the copy theme built around the old, oft-used, interesting, and potently meaningful phrase, "Busy as beavers." The front bears one word, "Busy," over stumps of trees cut down to the form of pencil points in the characteristic man-

ner of beavers. The lettered word is in outlined and shadowed letters which, with outlines of stumps and background over about half the page, is printed in black. The stumps are filled out with gray, and there is a rough-edged streak like a cloud across the stumps, across the top of the lettered line and back of the only two trees the beavers haven't operated on. The yellow 'cloud" makes a powerful eye-catcher. Each page or spread inside features some angle of your service, the most of which is made. Each page or spread is illustrated by an excellent drawing of beavers at work, used as thumbnail sketches in margins, but these are bigger than that term implies. The little animals are brown within black outlines, and in each case the yellow cloud motif is in evidence.

Cute Removal Announcement

NICHOLS & ELDRIDGE, Brockton, Massachusetts.-More readers, we believe, have written in for samples of birth announcements and removal notices than for any other items. Of course, we can't oblige and the best we can do is to mention key features of the more unusual. Yours discloses an idea which, if fitting, others might employ. As it happens, you were moving to Church Street, so, even though it might not occur to everyone, "Gone to Church" is a natural for top display of your folder. The front depicts a closed double doorway-of the old office-as if, but not actually, made up of rule. At an angle across the entrance, all but covering it, you have simulated a card on which "Gone to Church" is top and largest display; this is followed by "STREET, that is; No. 64, to be exact" in definitely smaller type. We think it is cute, and effective. The top display on the inner spread clarifies-even reiterates-that on the front; this is above a simple map which graphically shows the direction and distance of your move. Judging from this spread, we think your ideas are far and away ahead of your typographic craftsmanship. To be extreme for the sake of emphasis, it looks as if some one took a stick and ran from case to case all over the composing room for a line of one style here and of another there. That is figuratively, because it isn't that bad. With so many styles used, some are bound to clash. Hal Marchbanks, one of the greatest type men this country ever knew, averred



In his greeting, Mr. Barnhart, engaged on publications of General Motors Institute, strikes upon happy way of "shipping" a "train load" of good wishes. That is his way. Within the year, kind-hearted and thoughtful Oscar Barnhart, once in printing at Chicago, favored this editor in an unforgettable way with a book he'd long saught



Printers' Marks



OME doubt may exist as to whether it was Gutenberg or another who printed the first book from movable types. It is quite certain, however, that his contemporaries, Johann Fust and Peter Schoeffer, were the first printers to identify their work by means of a Printer's Mark. The

so-called "coupled shield" which they adopted for this purpose was first employed by them in the colophon of the famous Psalter which they printed at Mainz in 1457. This was the third book printed and the first having a date. Probably only a dozen copies were struck off, for use of the Benedictine Monastery of St. James at Mainz, which is one of the reasons for its exceptional rarity. The mark used by Fust and Schoeffer consisted of two shields hanging from a bough, one of them ornamented with two printer's rules "in saltire" or crossed, the other with a similar pair forming an acute angle. This was the forerunner of the countless devices which, during the next two centuries, were adopted by the printer's craft.

THE PI-BOX AUGUST 1956

Alert editor of San Francisco Craftsmen's bulletin features 1915 specimen sheet of Mergenthaler demonstrating Cheltenham, "hottest" type of the time, on cover of issue promoting meeting at which Paul A. Bennett, company's typographic manager, was the speaker



A SERIGRAPH BY JOHN · C · MENIHAN

Few typographers command as much craft respect as Joseph Thuringer, of Rochester Typographic Service. Title page of 6- by 9-inch French-style folder is less a demonstration of his typographic skill as of his ability to create a suitable atmosphere in simple ways. Strips of rule a pica apart and a router were all he needed to "picture" the net which frames the title

THE SPECIALTY PRINTER

Scientific Basis Best in Flexographic Drying Plans

- Drying oven operation can be set for an "optimum web temperature"
- In addition to heating units, cooling facilities must be adequately set
- Controlled procedures eliminate guesswork, add to production efficiency

With properly engineered drying equipment, it is possible to print at high speeds (200-500 feet per minute) and get results marked by strong ink adhesion and absence from odor and blocking.

Drying oven operation is usually based on experience, but in the case of cellophane a common rule of thumb is to set the oven temperature so that the film will shrink at least ½ inch for every 24 inches of web width. However, a few test runs can help determine exactly what the web temperature must be at a point directly after the oven in order to produce satisfactory drying.

When this temperature has been established at a specific point on a specific press, it is only necessary to adjust the oven to produce the same "optimum web temperature" in order to have trouble-free operation on subsequent runs, regardless of speed, ink coverage or film gauge.

To arrive at the "optimum web temperature" place a button-type pyrometer on the moving web at a spot 6 to 12 inches after it emerges from the oven. The particular spot where the pyrometer touches the web should be marked so that this same spot may be used every time the test is made.

Pyrometer Aids in Adjustment

The pyrometer should be protected by a baffle 2 inches high by 4 inches wide which should be attached vertically in such a way as to protect the button from any turbulent air blast which might emerge from the oven and affect the temperature reading. Before starting the test, it is important to be sure that the web is being heated equally across its surface. This can be done by operating under standard conditions and measuring the temperature at six points across the web.

All test locations should be at the same distance from the end of the oven. If the temperature is not the same at all locations, ask the oven manufacturer to locate the cause of the malfunction and correct Second of two articles

From News and Tips, house publication of Bensing Brothers & Deeney Sales Co., Philadelphia

it. With these preparations completed the program can get under way.

Using standard inks whose performance has been determined by past experience, operate the press at 200 feet per minute and set the oven temperature for normal operation at this speed. Read the pyrometer on the web and save a sample of the print. Reset the oven so that the pyrometer reads 25° F and 50° F above and 25° F and 50° F below its initial value and save samples of these runs. Repeat this at higher speeds.

After these tests have been completed, examine the sample for tackiness, adhe-

Heralding the Advertising Essentials Show, Nov. 19-21, Statler Hotel, New York City, is Lu Ann Warren with a crown of pencils, calendars, etc.



sion, flexibility and odor. In the case of cellophane, shrinkage should also be determined. An analysis of these data will indicate the proper "optimum web temperature" for the best results, and it should be about the same for all speeds. A separate series of tests will be needed for each press and each material which is printed because small differences in operating method can give erratic drying results.

With this information at hand, it is only necessary to regulate the oven so that it will maintain the desired "optimum web temperature." No recognition need be given to ink coverage, film gauge or speed because these will be automatically compensated for by the oven when it is set to maintain "optimum web temperatures." This simple procedure will do much to increase the reproducibility of results from run to run and will place the whole operation on a more scientific basis.

Next to poor heating facilities, probably the greatest cause of trouble in the rewound roll lies in the use of inadequate cooling facilities. Cooling equipment is required when printing nonabsorbent stocks to reduce the temperature of the web after it leaves the oven and before it is rewound.

Since ink, coated cellophane, polyethylene, Pliofilm and other flexible films are thermoplastic and will soften at high temperatures, it is safest to reduce the film temperature to about 85° F before it is rewound. Rewind temperatures higher than this decrease the safety factor of the operation and can cause trouble.

Excess Heat Can Cause Blocking

The extreme importance of cooling is often not fully recognized and makeshift arrangements involving low velocity household fans and the like are often considered satisfactory for this function. Their failure to do a good job is witnessed by the number of blocking problems which are produced by such equipment. A measurement of the temperature of the rewound roll of cellophane which has been cooled in this fashion usually reveals the inadequacy of fan-type coolers.

Adequate cooling can be achieved by means of a chill roller placed between the oven and the rewind spindle. A chill roller is hollow in construction to allow a continuous passage of water through its interior. Tap water is usually cold enough in the winter, but in summer a refrigerating unit often is needed to reduce the temperature of the water so that it can cool effectively. Chill rollers should be at least 8 inches in diameter and should be installed so that the web is in contact with at least 150° of the cylinder.

The performance of chill rollers can be checked by placing a pyrometer against the surface of the rewinding roll in order to measure its temperature. Adjustments should be made to either the water temperature or its rate of flow through the chill roller so that the temperature of the rewind falls below 85° F. Here, as in the heating operation, efficient and safe cooling can be achieved only through well-designed and engineered equipment. Substitutes and makeshift arrangements lead only to trouble or marginal operation.

The foregoing is presented to emphasize the importance of adequate drying, heating and cooling equipment, and to demonstrate how much they contribute to successful flexographic printing. Recognition of these factors will greatly minimize production problems in the field of flexography and will permit high-speed, reproducible performance. Finally, the control procedures recommended for the operation of ovens and chill rollers will eliminate much of the guesswork from these important aids to good flexographic printing.

"Packaging and Converting Fields Rising in Importance"—Smalley

The growing importance of the paper converting industry and the major role packaging and converting specialty printing plays in this field were pointed up recently by Alex Smalley, St. Regis Paper Co. vice-president in charge of labor relations, during an address to the 36th annual convention of the International Printing Pressmen and Assistants' Union of North America in Philadelphia on Sept. 25.

Mr. Smalley stated that specialty printing was fast becoming equal in importance to commercial and newspaper printing. "Fifty per cent of the inks used today by the combined printing industries," Mr. Smalley said, "are accounted for by packaging and converting specialty printing."

Some Scuffing of Lithographed Cartons Can Be Lessened by LTF Wax Treatment

Scuffing is a troublesome problem for many carton printers. The printed boxes rub against one another in shipment or in being handled and the ink rubs off. The customer's complaints then come back down the line and land in the lithographer's lap. He, in turn, usually pleads for an ink that will resist the abrasion.

Unfortunately, a litho ink that will take repeated abrasive rubbing just doesn't exist. According to tests made at the Lithographic Technical Foundation, scuff-proof inks are better than ordinary inks, but only to a degree.

However, there is a treatment that will prevent most cases of scuffing. This is the application of ordinary self-polishing floor wax to the sheets. These are wateremulsion waxes. When applied to paper,

A. R. Bradie to Chair Flexographic Committee

Alexander R. Bradie, vice-president of the Mosstype Corp., is chairman of Packaging Institute's reactivated flexographic printing committee. Foremost among its projects is an effort to improve pictorial reproduction. The committee welcomes suggestions and comments from all who are interested in the continued progress of flexography.

Serving with Mr. Bradie are John C. E. Williams, vice-president, Conapac Corp.; Frank Longenecker, vice-president, Simplex Paper Box Corp.; Frank A. Hamel, Jr., vice-president, Bensing Brothers and Deeney; Robert Zuckerman, New York office manager, Kidder Press Co.; Herbert F. Woody, superintendent of decorating, Chillicothe Paper Co.; John Cozza, vice-president for sales, Diaphane Corp.; Norman R. Rich, vice-president, Industrial Packaging Co., Inc.; Sol J. Perlman, president, Durapak Mfg. Co., Inc., and Malcolm Kimmelman, vice-president, Oneida Paper Products, Inc.

N. W. Postweiler, Riegel Paper Corp., is program chairman for the 19th Annual Packaging Forum Oct. 28-30, 1957, at Hotel Statler, New York City.

the water goes into the sheet leaving the wax on the surface. A separate run through a press is required to apply the wax but if the customer wants scuff-proof work, he should be willing to stand the extra cost.

Wax is applied to the printed boards after the ink is thoroughly dry. LTF has found that any good grade of water-emulsion, self-polishing floor wax will work. LTF experts suggest that the wax be diluted with two or three parts of water to one part of wax. Then put the solution in the water fountain on the press. Put on a freshly grained plate that has been counter-etched and gummed. Then, with the ink form rollers lifted, start the press and run the sheets. The dampener setting determines the amount of wax deposited on the sheets.

Only a very thin film is needed to prevent scuffing. It should not be so heavy that it will change the color of either the inks or the paper. Experiment a little to find out just how much to apply. Each job is different. Some general rules-of-thumb from LTF may help.

Uncoated papers usually require a heavier film of wax than coated papers. Start out with a two parts water to one part wax mixture for uncoated paper, and a three to one mixture for coated stock. After you have run a few hundred sheets, use these LTF tests to see if you are putting down too much or too little.

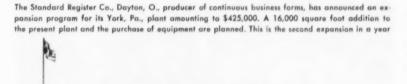
You can test to see if you are using enough with a piece of white paper. Hold the paper in your hand, rub it on a waxed sheet, and then inspect it. If the ink rubs off on the paper in your hand, you don't have enough wax on the sheets. If no ink rubs off, then you know you have enough. If this is the case, you should then test to see if there is too much wax on the work.

This test is also very easy. Place a threeor four-inch lift of waxed boards on a flat table. With your fingers or the flat of your hand, push the entire stack forward for a few inches and then stop. If the boards keep on sliding forward, there is too much wax on them. If the boards stop moving forward when you stop pushing, they are OK

The press inking rollers are off the plate but revolving during the waxing process. If they are allowed to run dry they may heat up. LTF suggests that you put a little laketine on the rollers during the run to prevent overheating.

The waxing technique was originated in Kansas City by Charles Beutner to solve a serious problem of scuffing on greeting cards.

The drawback in the procedure, of course, is the need for an extra press run.



THE COMPOSING ROOM

By Alexander Lawson

Questions will be answered by mail if accompanied by a stamped envelope.

Answers will be kept confidential upon request.

What's the Best Road to a Graphic Arts Education?

- How can young people best further their life-work training and education?
- Would formal education at college best prepare individuals for printing?
- Or is organized craft or apprentice training of the most practical value?

In a recent issue of THE INLAND PRINTER, a letter to the editor raised a question which is in the minds of many young people who are interested in printing as a vocation or who are already so employed. That question is "Shall I seek training and further education in a school or in a shop?"

The writer of the letter wanted to become a competent stripper-cameraman in a lithographic plant. He asked whether college training would help him. Many composing room apprentices face the same problem. Will a college degree contribute to their efficiency? Will it improve their financial status?

A completely satisfactory answer cannot be given. Many factors must be considered, such as the ability of the individual to respond to college training, his ambition to succeed at his job and to advance beyond it, and his realization of his role as an individual in a rapidly expanding industry.

Even though many of them lack formal education, printers have always been an intelligent and literate group. Traditionally, compositors have been at the top of the list. For that reason, printers have often maintained that formalized school courses in printing were not as necessary as craft training.

Apprentice Training Varies

All of us recognize the inherent value of apprentice training if the program is properly set up and administered. The fact to be faced, however, is that very few are so well organized. We all know that in actual practice this period can be a very undesirable experience. In many plants, the apprentice is allowed to perform only unskilled tasks, such as proofing and type distribution. In addition, no one comes forth with a friendly analysis of method and procedure.

What happens, then, in the plants which are not organized, and are therefore unable to provide even the outline of a formal training program? What occurs in the specialized plant, where the opportunity to receive a broad experience is severely limited? The results, it must be admitted, do not add to the apprentice's sense of responsibility or to his awareness of the importance of his job in relation to the industry as a whole.

A further complication in apprentice training today is the age of the apprentice. He is no longer a boy out of grade school or even high school, but is instead an adult, with an adult's economic responsibilities. He may even have a wife and family to support.

Where, then, does formal printing education fit in?

It begins, of course, in the grade school as a "shop" course, frequently nonvocational and generalized in its coverage. The next step is the high school. Here the subject matter is still introductory, but it often contributes toward true vocational training. The specialty or vocational high school goes still further. In most instances it is the last formal step in the training of a printer.

While the competence of instruction is in some instances very high, unfortunately it must be noted that too often the courses offered are substandard.

Competent Instructors Needed

Responsible printers, individually and in trade associations and clubs, have long been dissatisfied with the results of this kind of training. In the past few years, they have increased their efforts to supervise training methods and facilities in public schools. Too often, boards of education fail to provide competent teachers or the proper facilities. Frequently, school shops become a means by which printing can be produced inexpensively with student labor.

Substantial contributions to the establishment of high standards have been made by two organizations—the International Graphic Arts Education Association, an organization of printing teachers,

Newspapermen attended Farrar seminar on newspaper design sponsored by Mergenthaler Linotype Co., Atlanta, Ga. Standing (left to right): John McGee, Evening Post-News & Courier, Charleston, S.C.; Kenneth L. Dixon, American Press, Lake Charles, La.; Ray Shokley, Atlanta Journal; Benjamin Knight, Times, Florence, Ala.; Bert Struby, Telegraph and News, Macon, Ga.; Tom McRae, Atlanta Constitution. Seated: James W. Ward, Daily News, Jackson, Miss.; Gilbert P. Farrar, seminar conductor; Elizabeth Carnelius, Jacksonville, Fla. Times-Union; E. A. Shelnutt, Montgomery, Ala. Journal. Not shown, James G. Bellows, Atlanta Journal. They discussed modern methods of improving legibility techniques



and the Education Council of the Graphic Arts Industry, Inc., a group sponsored by the Printing Industry of America. Both groups are represented by a single secretary. Samuel Burt, who has done much to insure the success of the joint effort.

Printers in areas where school training is inadequate are advised to contact Mr. Burt at 5728 Connecticut Ave., NW, Washington 15, D.C., the home office of the PIA. Both organizations are alert to improve relations between schools and industry and can offer many suggestions to meet this objective.

A sample of their valuable work is an advertisement entitled, "Should Your Child Go Into the Printing Industry?" which appeared recently in Saturday Evening Post, Ladies' Home Journal, and Collier's.

The writer of the letter which prompted this discussion was interested primarily in printing education at the college level. Before answering his questions about the value of a B.S. degree to the printer in a small shop or to the craft specialist, we might look at graphic arts courses offered by colleges today.

The postwar period has brought a renewed interest in printing education. Since 1940, the number of colleges offering graphic arts subjects has greatly increased.

Colleges Offer Many Programs

Pressure from the industry itself has changed the college attitude toward graphic arts, in addition to the present position of the industry in the economic structure-a factor which offers an undeveloped area for higher education.

In the past, many colleges offered printing courses in connection with programs in journalism. This training has not satisfied commercial printers, as teaching has usually been at the country shop level, at least in practical shop practice.

At the other extreme have been the courses which have adopted an esthetic approach to printing as an art or craft. Such ventures have brought about an increased awareness of the quality of good printing.

The contributions of such men as Daniel B. Updike, whose course at Harvard resulted in a great book on type; George Parker Winship, also of Harvard; Ray Nash of Dartmouth, and Hellmut Lehmann-Haupt of Columbia, have been

The area between these extremes has been relatively untouched by higher education, except for the pioneering work performed by Carnegie Institute of Technology, which has successfully operated a degree course in printing since 1921.

There are now about 150 colleges offering courses in graphic arts, a number of which offer a B.S. degree in printing. The programs cover a wide range, de-

(Turn to page 110)

MACHINE PROBLEMS

Mr. Brewington will answer questions on machine problems. Write him in care of The Inland Printer

Replacing Motor Fiber Pinion

Q.—How do you renew a Linotype motor fiber driving pinion and what is the proper size? Also what makes the fiber pinion grind or howl at times?

A .- The procedure for putting on a new fiber pinion on Linotype motors located over the drive wheel is as follows:

- 1. Remove clutch arm.
- 2. Remove drive wheel guards attached
- 3. Remove end cap over motor starting switch if single phase motor.
- 4. Disconnect the two starting switch wires. Loosen wire bracket under extension bell of motor and pull starting wires clear of starter.
- 5. Loosen the two large top bolts that hold motor to machine frame; also the two side lower bolts.
- 6. Raise motor high enough to slip off drive wheel.
- 7. Take out the four screws in left side of motor and remove the end bell of motor.
- 8. Remove rotor of motor and take to workbench.
- 9. Ascertain if there is a pin through pinion or shaft collars on each side to keep it from slipping sidewise. Remove pin or collars and drive off pinion. In driving off pinion be careful not to spring rotor shaft. Do not use a cold chisel to cut off pinion.
- 10. If pinion is to be pinned on again, mark alignment of hole in shaft with pinion positioned in line with key. Graphite the shaft before starting pinion on. If you do not care to use pin through

pinion an inside collar will suffice. Cut a piece off a gas pipe 1/2-inch long and slip on the shaft first. The pinion has a tendency to work in instead of out. No set screw will be necessary in this gas pipe. The advantage of putting the pin through the pinion is that when the key slot becomes worn it will counteract the play of the pinion on the shaft.

11. Before replacing armature take a small amount of hard oil and with index finger push the oil ring up in the right hand bearing of the motor. This will prevent damaging. Replace armature. Put on end bell of motor, being careful to hold up oil ring. See that starting switch wires are not caught between end and bell of motor. Replace driving wheel.

12. Test for height of motor. Take three thicknesses of ordinary newsprint and run between drive wheel and fiber pinion. This should be correct height for motor. Tighten top bolts in motor first. Run paper through again. The paper should not be cut too badly from the test. Turn power on and see if pinion runs quietly. Tighten lower bolts. If this produces a grinding noise loosen lower bolts and shim with paper until motor runs quiet. Never oil the driving gear as this will collect dirt and cut the pinion sooner.

13. For Linotype motors, 21-tooth fiber pinions will give the proper speed.

Driving Belt Slips Off

Q.-What causes the driving belt to slip off when the motor is turned on or when the distributor stops?

A .- Loose belt. The belt may appear tight but it is not. Tighten at once as a loose belt will cause uneven power.

Keeping Liners in Place

There is a way to avoid the difficulties caused by liners which vary as much as one point in size. To tell which liners are in place put a dab of colored paint on the front of both sections of a liner, using a different color for each point size. Make a little chart showing which colors designate which size. Checking the mold disk against the chart will indicate which liners are in place.

The color will also pair up identical thicknesses of liner sections and prevent mixing up sizes due to wrong reading of stamped numbers.

Common Causes of **Ludlow Squirts or Splashes**

- 1. Matrices not being properly locked in the matrix stick. Absence of division quads in multiple-cast lines.
- 2. Dross and metal left between mold and mouthpiece at time of cast. This is usually caused by worn mouthpiece wiper.
- 3. Metal accumulation on the top of the mold. This is usually caused by a worn mold scraper.
- 4. Metal in the crucible not maintained at the proper metal level.
- 5. Improper heat is a big factor in controlling metal splash.

THE PROOFROOM

By John Evans

Questions will be answered by mail if accompanied by a stamped envelope.

Answers will be kept confidential upon request.

Proofreading in a Hurry?

Q.—I have been getting mail from a concern that sells a course and a mechanical device to increase reading speed by means of a "phrase-by-phrase" method. Do you think a proofreader would be justified in spending time and money to learn to read faster?

A.—No. Proofreading is not reading in the ordinary sense of the word. It is a kind of visual inspection, not alone of type matter, but of pictures and other artwork, and of indention, spacing, balance, consistency, and many other things.

Even the reading (proofreading) of plain text matter cannot safely be hurried. Every word must be read, and every letter of every word to make sure that they are all present, that they are in correct sequence, of the right typeface, in proper alignment, and undamaged.

In our opinion, phrase-by-phrase or "rapid" reading certainly has a place in this rapid age and will increase the consumption of printed matter, but it is a luxury the proofreader cannot afford.

Errors Got Barbecued

Q.—A customer sent us several sets of electros for a long run of food labels, two colors and varnish. There was no dummy, layout, or proofs. The instructions were to run them at once "as is."

On the press sheet, which I was asked to OK, the label read: "ORIGINAL FORMULAE Barbecue Sauce." There was a list of ingredients that ended with "and monosodium glutemate."

I declined to OK it, and the pressroom foreman was highly displeased. I explained to the production manager that I suspected misseplling in two places but could not prove it. "Original Formulae" (plural) could be an erroneous spelling of "formula" (singular) or it could be a trade name covering several other products. "Glutemate" could be either a mistake, an authorized alternative spelling of "glutamate" or the manufacturer's trade name for a substitute product. The word does not appear in any form in our Webster's Unabridged, vintage 1947, or in any other book available to me.

Since no one else around the shop would OK the proof, the plates had to be taken off the press and referred to the customer. We have heard nothing further and I seem to be in the doghouse. Was I too officious?

A.—The order certainly was explicit enough, and on that score you would have been justified in closing your eyes to everything but position and register, and any obvious defect in a plate. On the other hand, considering the costliness of such job, we believe you were right in calling the attention of the customer to your questions, even at the risk of some delay.

Monosodium glutamate (sodium glutamate; MSG) does not have any other spelling in the New Gould Medical Dictionary on our desk.

He Has Wheels in His Head, Too

Q.—One of our accounts makes tables and cabinets that have little swiveled rollers on the bottom for wheeling them about. These people apparently have two copywriters. One calls the rollers "casters"; the other writes it "castors." Between them, they have me on roller skates. In past jobs, there has been no uniformity, and they do not seem to care. For our own convenience, should I try to set a style for this word? If so, which spelling do you recommend?

A.—We have no objection to your setting a style if it will make you happy and free your mind for the contemplation of larger issues. Both the Merriam Webster's and Funk & Wagnall's dictionaries give first choice to caster in this sense; second to castor. The Oxford (English) prefers castor first; caster second. We vote for the American way.

As a further check, and having nothing else to do this quiet afternoon, we decided to see what the manufacturers of the little rollers call them in America. In the classified telephone directory they are listed—

Bassick, Darnell, Faultness, Hamilton, Jarvis, and all the others—under "Casters & Glides." There is no listing for "Castors." That ought to settle it.

Complimenting the Complement

Q.—Recently I was given a paste-up for offset printing of a 16-page booklet to read "for typos" without copy. The customer had OK'd the reproduction proofs, retained the copy, and gone on vacation.

In the introduction, these words occurred: "Upon reviewing the work of this Local the National Committee decided to adopt much of it for the national program. By so doing, the work of this Local was recognized and complimented."

Further on, this appeared: "How these two concepts compliment one another is offered here for your consideration." In the second case, I did not hesitate to change "compliment" to "complement." In the first, I did not know what to do, so I left it "complimented," but I'm still in doubt. What do you think?

A.—In the second example, your decision cannot be questioned. The correct word undoubtedly is *complement*, meaning that the two concepts mutually complete each other and together constitute a whole.

In the first example, second sentence, while the word complimented seems to fit all right with recognized, the sentence itself is afflicted with what is called a "dangling participial phrase" and ought to have been rewritten. Such an operation at that stage of production, and without the customer's consent, would have been both costly and hazardous. We think you did all you reasonably could. Just be sure that customer's OK does not get lost.

Government Tells You How

Q.—When a hyphenated word is enclosed in quotation marks (for use in comparison) should the hyphen be dropped or retained?

A.—We knew the answer to that one but decided to make it official by digging out the citation: U.S. Government Printing Office Style Manual, 6.25, page 66: Do not use a hyphen in a unit modifier enclosed in quotation marks unless it is normally a hyphenated term, but quotation marks are not to be used in lieu of a hyphen. Examples: "blue sky" law; "good neighbor" policy; "tie-in" sale.





A stack of page proofs is checked by Miss Kate Jasper of Washington, D.C. Although 75 years of age, Miss Kate has not lost her eye for catching those elusive typographical printing errors

52 Years of Proofreading And Still on the Job!

Miss Kate Jasper recently celebrated her 52nd year of continuous employment at the National Publishing Co., in Washington, D.C., although she neither applied for the job nor was formally hired.

Miss Kate, as she is affectionately known to her fellow employees, surreptitiously started work in 1904 when Teddy Roosevelt was President, Ford cars were just making their appearance on the streets of Washington, and a pressman was well paid at \$18 a week.

Her employment, which started with a real O. Henry twist, came about through pure coincidence. In 1904 her sister, Ada, got married and one morning decided to give up her proofreading job at National Publishing Co., for homemaking instead.

Miss Kate had had her fill of housework, and saw in her sister's resignation the opportunity she had been looking for. Miss Kate had discussed the job with her sister many times and knew a great deal about the work. So after a brief discussion in which she pin-pointed job requirements, she buttoned on her high top shoes and went to work in her sister's place.

Because of the close resemblance of the two women, the first day on the job passed without mishap. Then a week went by, then several weeks, and finally months.

But one morning in early spring the facade came to an end. Miss Kate was recognized; but by this time her fellow employees had accepted her, her work had been satisfactory, and a successful appeal was made to management to allow her to stay on the job.

Miss Kate not only stayed, but in 1920 became a full-fledged proofreader and a member of the International Typographical Union. In 1929 death took her sister Ada, and along with another sister she assumed the task of housing, feeding, and mothering Ada's five children.

She has witnessed the growth of the National Publishing Co. from a handful of employees in 1904 to the more than 350 today. Daily, in spite of her 75 years, she makes the trip from her home at 644 Massachusetts Avenue, N.E., to check mountains of page proofs just as she did in the early days.

To Miss Kate, reading proof today is the same job it was 52 years ago. "Magazines and formats may change," she says, "but the business of catching the elusive typographical errors which plague the printing business goes on."

Promotes Aid to Small Businesses

Senator George D. Aiken, hailing from a small state, Vermont, is planning to take action that should merit support from small printing plant operators. Recently he pointed out the lack of informational and guidance services for small business management. He plans to move towards supplying this need by pressing for legislation next year to set up a federal small business extension service patterned on the Agricultural Extension Service that benefits farmers.

Causes and Measurement Of Paper Pick Resistance

(Concluded from page 53)

printability. At present, the staff of the institute consists of 25 trained personnel who do research on printing ink and related graphic arts projects. Many of these have graduate degrees in chemistry and are part of the Lehigh University faculty; some are students in the University's Graduate School; a number are employed as full-time laboratory technicians.

In addition to conducting a widely diversified research program of value to the entire printing ink industry, NPIRI serves its membership through its annual technical conference where representatives meet to share fundamental information and to exchange and develop ideas of mutual benefit.

A recent article published in an industrial house organ pointed out the potentialities inherent in research efforts aimed at discovering and understanding the factors which influence and are responsible for the performance of a particular product. To conduct, protect and encourage research has become increasingly the duty of both industry and university. Only through such efforts will progress be realized.



WHAT'S NEW?

IN EQUIPMENT AND SUPPLIES

18x22 Dark Room Camera

The Commodore is a new all-metal 18x22 dark room camera made by the W. A. Brown Manufacturing Co.

The camera track is bi-rail with a center tube for rigid construction. A precision screen mechanism is fitted to the rear case which is also adaptable to a screen raising device.

The vacuum film holder, aluminum cast, and the ground glass and frame all swing out from the camera. The ground glass has a one-inch square clear center, with 1/4-inch diagonal clear lines running from center to each of the corners.

Ball bearing action has been built under the front case which houses the lens-



Camera uses swinging film and glass holders

board and the electric shutter. This front case can be operated from the dark room as well as the gallery.

The copyboard has the same mobility as the front case. Of a tilting construction, the 24x36 glass-covered copyboard is counterbalanced in both the vertical and horizontal positions. A single locking handle locks it in both positions.

With a 16½-inch Goerz Artar "Red Dot" lens, coated and color corrected, a reduction of 4X or enlargement of 2X is possible. An additional lens, 10¾ inch, permits 3½X enlargements and allows 7X reductions.

Other features of the Commodore are: Lamp carriers of the swing type that ride on a separate base, yet can be coupled to the copyboard. Each lamp housing consisting of four 30 w Blue Line fluorescent lights has its high power factor transformer. The scaling system, mounted in the gallery, is of the rigid type, and is calibrated in percentage. Flexible bellows permit an extreme compression of extension. The solenoid type electric shutter works in conjunction with the timer. After the exposure is completed the shutter closes automatically.

The Commodore is also available in sizes 24x24 and 31x31.

For information: W. A. Brown Mfg.

For information: W. A. Brown Mfg. Co., 608 Dearborn St., Chicago 5.

Offset Blanket With "Skin"

Sun Coppertone is an offset blanket for which unusually long life with high quality reproduction is claimed by the Sun Supply Co.

A special protective skin effect is the most important characteristic of the blankets. This is achieved by curing the blanket to a finished thickness of 0.065 inch, making the surface differ from its rubber interior.

The protective skin thus formed is said to minimize the chances of smashups. In addition, there is a high resistance to solvents, embossing and ply separation. Uniform thickness also reduces the amount of makeready time required.

For information: Sun Supply Co., division of Sun Chemical Corp., 10-10 44th Ave., Long Island City 1, N.Y.

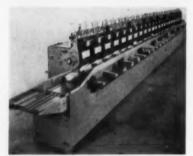
Code Printing "Numbering" Unit

M. H. Convex 5 channel tape coder is a new device designed for use on rotary presses to print dots, dashes, or specially shaped figures instead of conventional numerals. These code markings, representing serial numbers, are printed on documents, checks, order forms, and other commercial papers used in electronic data processing. The electronical scanning is achieved by reflected light or magnetic ink instead of the perforated hole or feeler type of sensing.

For information: Wm. A. Force & Co., 216 Nichols Ave., Brooklyn 8, N.Y.

Numbering machine prints code in magnetic ink





A 25-station gathering machine collects mixed greeting cards at an average of 3,000 per hour

High Speed Gathering Machine

Of unit-type construction, a new machine has been designed to gather automatically book sections, book folios, greeting cards, gift wrapping paper, patterns, and other material. Available with from 6 to 25 stations, it operates at an average speed of 3,000 complete sets per hour.

Each station feeds from the bottom of the stack, virtually eliminating down time for reloading, according to the manufacturer. Metal grippers similar to those on printing presses remove stock from the pile and deposit it on a conveyor trough.

Sheet sizes range from 3x5 to 10x12, and larger models are available. Materials that can be handled range from 40-pound offset papers to 64-page signatures.

For information: Macey Co., 5350 W. 130th St., Cleveland 30, Ohio.

Automatic High-Speed Paster

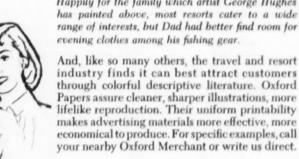
A fully automatic, high-speed paster has been perfected by the Goss Printing Press Co. Stressing the conservation of newsprint, the announcement points out that the Paster Pilot assures salvage of practically every inch of usable paper from the expiring core. In addition, the unit contributes to higher net production, increases efficiency, and minimizes the possibility of human error.

There are no push buttons to operate. The roll tender prepares the new roll with pasting glue and tabs. The Goss Paster Pilot then takes over the Reel-Tension-Paster and indexes the new roll into position, lowers the brush and knife carriage, lowers the predrive, brings the new roll up to speed, makes the paster, and indexes the roll to proper running position.

It is not necessary to slow down the press when splicing. Pasters can be made



xford Papers HELP BUILD SALES



Papers assure cleaner, sharper illustrations, more lifelike reproduction. Their uniform printability makes advertising materials more effective, more economical to produce. For specific examples, call your nearby Oxford Merchant or write us direct.



This insert is a sample of the offset results you can get on



WESCAR OFFSET AND RANGELEY OFFSET (companion grades manufactured at the West Carrollton and Rumford mills, respectively) are bright, white papers of high opacity, exceptional strength and ink receptivity. They have excellent bond and are free from lint and fuzz. Designed to insure maximum performance at high speeds, they are recommended for fine reproduction of halftones and multicolor process work. Wescar and Rangeley Offsets, white, are available in both regular (smooth) and vellum finish. Wescar Offset, vellum finish, is also available in eight distinctive tints — ivory, canary, French gray, tan, green, blue, pink and golden yellow.

WESCAR TEXT is a brilliant white, opaque offset paper in vellum finish permitting fine gradations of tone from white to solid black. It reproduces details of line drawings, halftones and color process illustrations with distinctive fidelity. Wescar Text is a de luxe offset sheet meeting the most exacting standards for printing results and press performance.

CARROLLTON OFFSET is a bright white offset paper of good opacity and regular, uniform surface. Free from lint or fuzz, it is carefully manufactured to give trouble-free press performance. Available in vellum finish, Carrollton Offset is recommended for quality offset reproduction at moderate cost.

TWO VALUABLE AIDS: (1) The OXFORD PAPER SELECTOR CHART helps you select the right grade of paper for each job. (2) The OXFORD PAPER COST CALCULATOR quickly gives the exact cost per 1000 sheets for common weights and sizes of printing papers. Ask your nearby Oxford Merchant or write us direct.

Nation-wide Service Through Oxford Merchants

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at speeds up to 60,000 papers an hour. The unit has the proper timing required to start the pasting cycle and deliver expired cores with $\frac{3}{16}$ -inch wrap of paper or less in waste.

For information: Goss Printing Press Co., 5601 W. 31st St., Chicago 50.

Automatic Mail Inserter With One-Sided Control

"Perfect contents" accuracy is claimed for a versatile, high-speed envelope stuffer by the manufacturer, Pitney-Bowes, Inc. The machine is an automatic mail inserter which collates and nests enclosures, opens and stuffs envelopes, counts, seals and power-stacks the mailing, and optionally imprints postage in one continuous operation at output speeds up to 6,000 an hour.

The Model 3100 mail inserter opens the flaps and throats of envelopes, inserts into them as many as four automatically collated or nested enclosures, and closes, seals and counts the mailing pieces. The optional postage meter attachment imprints the envelopes with a meter stamp or other postal indicia.

One operator in a 7½-hour day can easily produce 30,000 to 40,000 stuffed pieces ready for mailing, according to the manufacturer. In addition, substantial savings in costs and clerical drudgery can also be achieved by using the inserter on short runs and small volumes.

Jobs can be set up on the machine rapidly and easily without a tool kit. Minor adjustments are made by the turn of a knob, and a straight-line, self-centering feed eliminates alignment problems.

Two stated features are the machine's accuracy and jamming protection. Automatic signals prevent misfeeds and insure perfect contents for each envelope, and a detector prevents jams, faulty inserting and the mutilation of enclosures.

A variable speed control permits the running of difficult jobs through the dial-

ing of slower cycles. The machine can accommodate a wide range of material sizes, including envelopes from 6x3½ up to 12x6, and handles varied materials with novelty shapes, sizes, and folds.

Another feature is one-sided control, enabling one operator to handle the complete operation on the inner side of the machine's L-shaped design.

For information: Pitney-Bowes, Inc., Stamford, Conn.

Tilt-Top Stripping Table

To their Zenith line of photo-mechanical equipment, Zarkin has added a tilttop layout and stripping table. The table



Layout table with Lewis precision ruling device

tilts from flat to a 30° angle. A pencil tray is in the forward edge of the squared-up top. Heavy translucent glass is lighted by fluorescent tubes to give strong, even diffusion. Two knobs control the angle of the top.

The $23\pi34$ -inch table may be used for the preparation of flats for press plates, combining negatives, opaquing, tracing, ruling of business forms, squaring up and lining up. A Lewis precision litho-ruling and stripping table attachment may be fitted to the table as optional equipment.

For information: Zarkin Machine Co., Inc., 34-19 Tenth St., Long Island City 6, N.Y.

Insert machine collates, nests enclosures, opens and stuffs envelopes, seals and counts the pieces



Layout-Stripping Tables: Vacuum Printing Frames

A new line of stripping tables and an improved series of floor type vacuum printing frames have been announced by Robertson Photo-Mechanix, Inc.

The tables have been designed to reduce operator fatigue by providing knee and leg room on all four sides. A special reflector and a new light diffusing material eliminate the deep reflector and insures uniformity of light distribution.

Illumination of these opaquing-layoutstripping tables is available in two stages controlled by convenient switches, which permit bright light for positive stripping and brighter light for negative opaquing.

The use of ordinary plate glass instead of ground glass for the surface is made possible through the use of the special diffusing material.

Robertson Even-Lite tables are offered in sizes up to 50x72. An optional copy holder can be mounted on a flexible arm to hold artwork in front of the operator.

A single lever release arm is a feature of the floor type vacuum printing frames. This lever permits one hand operation to open and close the frame, and allows the use of a double action safety lock which prevents the frame from being accidentally opened during an exposure.

The vacuum blanket with double beading and parallel rib design is mounted on a spring loaded board to provide vacuum seal. Adjustments on the spring loaded board make it possible to maintain proper blanket pressure. The glass lid and frame are completely counterbalanced so they remain open without any complicated catches or support arms. Both the hinges and counterbalances have been designed to allow negatives and positives larger than the frame size to protrude without interfering or breaking the vacuum.

Any desired degree of vaccum can be had, at the operator's choice. Movement of the vacuum control to the release position bleeds the frame immediately. The frames are available in a wide range of sizes.

For information: Robertson Photo-Mechanix, Inc., 7440 Lawrence Ave., Chicago 31.

India Ink Ball Point Pen

Opaque India ink has been gelatinized so that it can be used in a ball point pen. The "Black India" pen offers the convenience of a ball point with the advantages of regular India ink.

Some advantages of this combination include perfect opacity; an ink which is indelible, waterproof, and instant drying; and a pen which can write on sensitized facsimile papers, or can be used on direct image offset paper plates.

For information: Samuel Taubman & Co., 178 Madison Ave., New York 16.

Sheet-Fed IIxI5 Offset Press Is Added to Chief I5 Line

Due for first deliveries in December is American Type Founders' Chief 15 sheetfed 11x15 press, designed for fast commercial production, including color and fine halftone work, and manufactured by Whitin Machine Works, 125-year-old builders of precision industrial machines.

This newcomer in the Chief line is said to be the first offset press of its size designed with special commercial printing problems in mind. It has 26 features of interest, according to ATF, including the following:

A snap-on device provides quick plate changes. The plate cylinder takes pin bar, oval, serrated or square-end plates. Interchangeable ink units make quick color changes possible. Ink form rollers are ball bearing mounted. The dampening mechanism provides fine adjustment with an 11-notch fountain roll control. Dampener and ink form rollers can be applied to the plate in a single lever motion.

Right and left side push guides provide accurate register and make it possible to run work-and-turn jobs as on larger off-set presses. Seven tumbler grippers control paper through the run. The transfer cylinder has seven grippers to assure positive paper delivery and permit bleed printing on three sides. Micrometer style adjusters assure accurate three-point register. All cylinders ride on tapered roller bearings. Normal operation adjustments can be made without tools.

The Chief 15 is offered with extension pile or chute delivery.

For information: American Type Founders, 200 Elmora Ave., Elizabeth B, N.I.

Magnesium Base, Furniture

Monomelt's "Double M" magnesium newspaper base and light metal furniture is now being finished to plus or minus 0.001-inch in height and 0.0025-inch in length and width, according to a company announcement. The light metal is durable and is one-sixth the weight of cast

Magnesium furniture is held to close tolerances



materials, making the form lighter and easier to handle. A lower first cost is also claimed

For information: Monomelt, Inc., 1611 Polk St., NE, Minneapolis 19.

Blanket for Coating Metal Sheets

The Jomac metal coating blanket is made by bonding a thick layer of rubber to a canvas blanket and grinding to a



Coating blanket installed on core, with cover

smooth surface. It may be used either for spot coating by cutting out noncoating surfaces, or for solid coating.

This rubber blanket is installed on a special core which has a gap running the length of the core. Ends of the blanket are held by a locking device inside the gap.

The core accommodates blankets of its own width or shorter. By using one core per coating machine, core inventory is drastically reduced. Blankets can be hung vertically; thus, storage space requirements are cut. Cores need not be shipped when regrinding is required, and freight costs are saved. Savings in downtime for roller change can be effected, according to the company, as new blankets can be installed in about 15 minutes without taking the core off the machine.

The rubber metal coating blanket is supplied in diameters of from 15½ down to nine inches.

For information: Jomac Inc., 6128 N. Woodstock St., Philadelphia 38.

Cleaners for Graphic Arts Use

Film-Kleen, one of two additions to the Anchor line, is a nontoxic cleaner especially formulated for the safe, quick cleaning of acetate, vinyl and polystyrene film, glass, color filters, screens, vacuum frames, lenses, and other camera, stripping, and graphic arts equipment.

Robinol is a nonflammable multipurpose cleaner which is free of coal tar solvents, benzol, carbon tetrachloride, and other health hazards. This Anchor product is described as 20 times safer than carbon tetrachloride cleaning agents, yet safely removes oil, grease, ink, tar, gum and dirt from type, film, pumps, and Linotype matrices.

Both products are available in various size containers.

For information: Anchor Chemical Corp., 827-837 Bergen St., Brooklyn 38, N.Y.

Photo Display Type Printer

The StripPrinter is a new headline type composing machine for producing display type on photographic paper in sizes from 18 to 72 point.

Film strip negative alphabets are passed through the machine and exposed one letter after the other by means of an attached exposure light. Exposure is on 35 mm photo paper in strips of any length up to 100 feet.

Slow emulsion speed paper, which may be printed and developed in reasonably subdued light, is available. No darkroom is necessary. Developing, rinsing, and fixing of the paper prints require about two minutes. After a water wash to remove the fixer, the waterproof paper may be wiped dry and applied immediately to the layout.

Alphabet films are available in over 30 different type styles and in an assortment of sizes from 18 to 72 point.

For information: Stripprinter Mfg. Co., P.O. Box 9551, Shartel Station, Oklahoma City 18, Okla.

Headline and display type photocomposing unit



New Colors Added to Ink Line

The Van Son Holland Ink Corp. announces the addition of 20 new colors to their regular line of stock Quickset inks. Packaging is in both the regular one-pound cans, and in the new cartridge-type containers.

The new inks can be used for both litho and letterpress printing. Included in the new colors are three greens, two blues, brown, red, goldenrod, silver, and gold.

For information: Van Son Holland Ink Corp., Mineola, N.Y.

Margin Punched Carbon Paper

To eliminate the punching of carbon paper by printers who are preparing continuous forms, the American Carbon Paper Corp. is now offering a one-time carbon paper that is already marginally punched and perforated.

Tara marginally-punched carbon is available in nine sizes to fit popular business forms, and in four grades, both blue and black.

For information: American Carbon Paper Corp., 1313 W. Lake St., Chicago 7.

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THE INLAND PRINTER for November, 1956

Proof Press for Curved Newspaper Stereo Plates

A proof press that duplicates the printing conditions of high-speed newspaper



Rotary proof press for curved newspaper plates

presses has been developed by the Cottrell Co. The first of these presses will be installed in the stereotype department of the Chicago *Tribune*.

The proof press is a one revolution and stop machine that delivers a proof in one and a half seconds. It utilizes the same printing technique and the same cylinder diameter as production presses. As the proof is also made without makeready, the proof shows the exact condition of printing quality of the plate.

A special inker is operated by its own motor when in the back position. The grippers are foot operated, while hand levers control the impression trip and engagement of the power drive. Knurled adjustment knobs are provided to run the plate hooks into position quickly. The feedboard is hinged to give complete access to the impression cylinder for renewal of packing.

This plate proof press is designed to accommodate the heavier newspaper stereotypes. It has been built as low as practical so that the operator does not have to raise heavy plates much higher than his waist in putting them on the press. The unit occupies a floor space of 58x80, weighs 3,000 pounds.

For information: Cottrell Co., Westerly, R.I.

Styrene Sheet for Printing

"Registrite," a new modified styrene sheet made especially for the printing requirements of the display, toy, and other industries, has been announced by Chicago Molded Products Corp. Advantages claimed for the new material are lower and consequently more uniform strain pattern, superior color, and lower cost than all materials previously used for print-register applications.

The strain pattern approximates a nearuniform five per cent, according to the company, affording better accuracy of the final image on vacuum-formed products, and thereby lessening rejects and costs. It was also stated that the thermoplastic material's mat finish is an ideal surface for printing ink adhesion and that its blue-white color enhances printed colors. It is stocked in various thin gauges for display work. Registrite is said to have high impact resistance and also excellent formability.

For information: Campco Div., Chicago Molded Products Corp., 2717 N. Normandy Ave., Chicago 35.

Galley, Lead and Slug Cabinet

An overhead lead and slug rack has been joined with a galley cabinet in a new combination by the Foster Mfg. Co.

It consists of a galley cabinet with a flat makeup top for slug composition. Work-



Combination galley cabinet, lead and slug rack

ing surface height is 40 inches, depth 28. It is made in three models, for $8\frac{1}{2}$ x13, $6\frac{1}{4}$ x23½, and 12x18 galleys. All models feature a drawer for equipment and materials, and toe room along the cabinet front.

Ten inches of materials of each length from 6 to 45 picas, by picas, is stored in the overhead lead and slug rack. It holds 650 pounds of precut material. The overhead rack can be fastened at either end of the cabinet. The rack can also be purchased separately and is predrilled for installation on cabinets.

For information: Foster Mfg. Co., 13th & Cherry Sts., Philadelphia 7.

Dampener Roller Cleaner

Rogersol Turbo 166 dampener is a highly concentrated cleaner for dampener rollers that thoroughly cleans covers with a minimum of solvent and that will remove the hardest of set inks even if the rollers have remained unwashed for days, according to the manufacturer. A minimum of rinsing is required, with no danger of blinding plates. The cleaner is claimed to be nonflammable, nontoxic, and dermatitis controlled.

For information: Harry H. Rogers Co., Inc., 5331 S. Cicero Ave., Chicago 32.

Power and Lever Cutters For Smaller Paper Sizes

A line of power and lever paper cutters in 19-, 23-, 26-, and 30-inch sizes has



H model cutters feature speed and are automatic

been announced by the Challenge Machinery Co.

Among the features of this H model line are 100 per cent faster knife action, simplified knife changing, automatic knife bar return, greater table operating room, improved safety features, and increased strength.

A special feature of the 19-inch cutter is a safety control that requires both hands on the controls throughout the entire cutting cycle. If either hand is released, the blade stops instantly. This is also available as optional equipment on the 26- and 30-inch machines.

Semi-automatic operation with a cutting rate of approximately 28 cuts per minute is possible with the 26- and 30inch models. All power models are available with either a hand or a power clamp.

For information: Challenge Machinery Co., Grand Haven, Mich.

Plastic-Backed Electrotypes

A combination of a standard copper electrotype shell with a specially developed plastic backing material, instead of the usual lead, has been developed on the West Coast. This new type of duplicate letterpress printing plate is called the "Electroplastic" plate.

The principal advantages claimed by the manufacturer are plates that are 75 per cent lighter in weight and 25 per cent lower in cost. Electroplastic plates, so far as is known, are the first to combine successfully copper and plastic.

Electroplastic plates may be mounted on standard blocking materials. They are resistant to cleaning solutions; the plastic is not affected.

For information: Johnson Mat & Electrotype Co., 555 Washington St., San Francisco 11.



ACCENT ON QUALITY

Today fine reproduction need not be limited entirely to high-priced enamels but can be achieved on modern papers costing far less than you might think. At Kimberly-Clark quality is "engineered" into every sheet in every grade. And quality at every grade level means that ream after ream has the same careful balance of whiteness, dimensional stability, opacity, strength and a host of other important properties. It will pay you to compare Kimberly-Clark Printing Papers in any way you choose—including the cost. We're as close to you as your nearest distributor.

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Kimberly-Clark Corporation · Neenah, Wisconsin

Vertical Single Stack Flexographic Press

High operating speeds and accurate color printing are combined with versatile operation in a new flexographic press built by the Champlain Co.

The new press features unit assembly that can provide up to three color stations mounted vertically in a single stack. It was designed specifically for printing on board, but is also suitable for such materials as plastics, cellophane, foil, glassine, paper, and paperboard.

The single stack feature permits inline use with special fabrication equipment to provide printing, punching, scoring, and stripping in a single operation. It can also be used in combination with a sheeter-

rewind or specialty unit.

Each stack has its own individual drying system, speeding up the drying of colors between stations. This unit drying design, the manufacturer reports, increases operational speeds for multicolor work. Another advantage of unit stack design is that the web comes from the dryer with the printed side up; the operator has a constant view of the printed surface for register control. It also makes



All-size press shows stack arrangement and dryer

possible the use of subsequent inline fabricating equipment.

Two basic types of flexographic presses are available in this series, with each type made in four different press sizes-20, 26, 36, and 44 inches. The repeat increment press provides printing increment repeats of 0.157-, 0.250-, 0.314-inch or larger from plate cylinders from 12 to 36 inches in circumference. The all-size press permits stepless repeat of the cylinder within the circumference range of 12 to 36 inches.

The repeat increment press unit features a swing-out construction with inking and plate cylinder frames mounted on

a swinging sub-base. The section can be independently rotated away from the moving web and rotating press parts to



Swing out construction on repeat increment press

facilitate color changeover or plate replacement. The drive is connected directly to the impression cylinder.

The all-size press is designed for boxboard or label printing, where varying repeat sizes are required for glueflap interlocks, folds or filling machine requirements. This varying size repeat is possible because the drive is connected directly to the plate cylinder.

On both press models, the plate cylinder features roller bearings mounted in a cartridge design. The cartridge is removed from the press with the plate cylinder but can be transferred to a new cylinder without removing screws or clamps. Side register control is through the plate cylinder. Running register control of 25° is maintained through a spiral gear arrangement.

Each unit contains a two-roller system for either the squeegee or anilox method of ink distribution. Inking rolls are mounted on ball bearings and move to and from the plate cylinder through micro-adjustments that provide a vernier and quick setup control.

Continuous ink circulation is provided through a portable explosion-proof fivegallon centrifugal pumping system with a gravity return. Minimum distance is maintained between all ink transfer points to prevent drying in of ink film.

Three types of dryers are availabledirect gas flame, steam coil, and electrically heated air. The steam and electric dryers have an integral recirculating system. A total of nine feet of web is under the dryer at any one time.

Large breaker rollers, seven inches in diameter, permit the running of board up to 30-point without checking or cracking. Made of aluminum tubing, the rollers are mounted on ball bearings to assure free rotation with minimum drag.

For information: Champlain Co., 88

All Metal Overhead Camera: Vertical Plate Coating Machine

The Lanston Plate Coating machine embodies new features while retaining the advantages of vertical plate coating, according to the company announcement. This machine uses the principle of rotating the press plate in a position of 15° from the perpendicular.

Redesigned, the plate coater incorporates a forced, thermostatically controlled, filtered hot air system. This results in a more uniform and dust-free sensitized coating with less solution than that used by horizontal plate coaters, the company

claims

A new drying system assures a completely uniform blanket of hot air distributed over the surface of the plate with a decrease in drying time. An improved clamping arrangement holds either press plate or glass negative firmly.

Three tank sizes are available: 68-inch, floor space 38x80; 85-inch, floor space 40x96, and 112-inch requiring a floor

space of 42x123.



Overhead camera engineered to handle any task

Designed to fill the needs of the offset, gravure, and silk screen processes, the new Lanston Camerama offers an economical, accurate tool for use in the graphic arts, according to the manufacturer.

It is a darkroom, overhead camera with an over-all length of 15 feet 9 inches and a height of 7 feet 6 inches. Patented rubber shock mounts on both ends isolate the

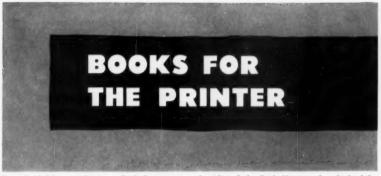
camera from vibration.

Both copyboard and lensboard are manually operated by controls located in the darkroom, where all predetermined settings of each are made by focusing tapes and the use of the Lanston focusing chart system. The compression type copyboard tilts back to a horizontal position.

The Camerama features a zoned type vaccum back with film capacity of 4x5 to 18x22. The zone required can be selected by means of a sliding manifold operating on an indexing arrangement. A swinging frame with ground glass is pivoted in a vertical plane.

For information: Lanston Monotype Machine Co., 24th & Locusts Sts., Philadelphia 3.

Llewellyn Ave., Bloomfield, N.J.



The Inland Printer maintains a Book Department and copies of the Book List may be obtained by writing the magazine, 79 West Manroe St., Chicago 3, III. When so noted, books reviewed here may be obtained by sending money order or check with order. Price includes 35¢ handling charge

Producing School Yearbook

SCHOOL YEARBOOK EDITING AND MANAGEMENT, by C. J. Medlin (THE INLAND PRINTER Book Department. \$5.35).

This book was written for the inexperienced student editorial staff and for faculty advisers to provide readily available information on all the basic problems of yearbook production. It covers the complete job with chapters on planning the book, getting pictures, working with the engraver and printer, production by offset, writing editorial, and others. It is fully illustrated with pages and pictures that make up actual yearbooks.

The value of this work to a printer is in helping him to work with the student yearbook staff. He should more readily understand the purpose, needs and problems in producing a yearbook and, with the knowledge of his own capacities, can be more useful to the customer as well as make the job easier for himself.

Sources of Mailing Lists

GUIDE TO AMERICAN DIRECTORIES FOR COMPILING MAILING LISTS (B. Klein & Co., 27 E. 22nd St., New York 10. \$10).

The 1956 edition of this guide lists more than 1,200 directories that can be used for making up specialized and general mailing lists. The directories are arranged in more than 200 trade, industry, and professional categories, and each listing indicates the number of names in the directory, the price, and the name and address of the publisher. The guide is termed an "indispensable" aid for developing accurate, comprehensive mailing lists.

Graphis Annual 1956-57

GRAPHIS ANNUAL: 1956-57, edited by Walter Herdeg and Charles Rosner (Hastings House, 41 E. 50th St., New York 22. \$12.50).

High artistic standards and human interest have been the guiding principles in selecting the examples for this fifth edition of an admirable collection of international advertising art. Rather than follow the general trend of advertising in trying to "give the masses what they want," the attempt here is to show some responsibility toward society in the manner of the advertising and to raise the intellectual level of the selling medium.

Illustrations are in full color as well as black and white and include samples from such countries as Japan, Israel, and Switzerland. Text material is written in English, French, and German. The six sections of the book are posters; magazine and press advertisements; booklets, catalogs, programs; magazine covers, book jackets, record covers; packaging, calendars, Christmas cards, and animated advertising, trade-marks, and letterheads.

Industrial Accident Prevention

SUPERVISORS SAFETY MANUAL (National Safety Council, 425 N. Michigan Ave., Chicago 11. \$3.25 to members, \$6.50 to nonmembers. Quantity price list available on request.).

This is a guide for foremen in industry and can be used for group training or individual study in preventing accidents with emphasis on the human element.

Design Ideas for Envelopes

TYPE FOR ENVELOPE DESIGNS (A. T. Bermingham, Jr., President, Columbia Envelope Co., 2015 N. Hawthorne Ave., Melrose Park, Ill. \$1).

For ideas on envelope styles, postal indicia, and corner card designs, this 100-page catalog should prove useful. Fifty-four type specimens are included with business reply forms and paper samples.

Columbia Envelope Co. offers envelope designs



Sketches of American Designers

AMERICAN TYPE DESIGNERS, by P. K. Thomajan (distributed by Department of Printing, Rochester Institute of Technology, 65 Plymouth Ave. South, Rochester 8, N.Y. No Charge).

Interviews with 13 American type designers contributed to these biographical sketches which convey a feeling for their personalities and style as designers. Such well-known people as Bruce Rogers, who designed Centaur, William Dwiggins, creator of Caledonia, and Richard Kaufmann who designed a script, are included.

Rochester Institute of Technology students produced this attractive book as a project in hand composition and presswork. Art students contributed scratchboard illustrations of each personality.

Textbook on Newspaper Design

FUNCTIONAL NEWSPAPER DESIGN, by Edmund C. Arnold (THE INLAND PRINTER Book Department. \$7.85).

Liberally supplied with illustrations exemplifying good newspaper layout, this book is based on the principles of good design. Every feature of newspaper design—body type, headline type, mastheads, photographs, and the combinations of these elements—is surveyed. The specific functions of the sports page, editorial page, teen-agers' page, and others are analyzed. This book should be useful to a newspaperman for reference and ideas and is basic and comprehensive enough for a college textbook.

Typographical Responsibility

THE CRYSTAL GOBLET, by Beatrice Warde (World Publishing Co., 2231 W. 110th St., Cleveland 2, Ohio. \$6).

"The good citizen is supposed to feel some responsibility for the health of industrial design in his country; the literate man is expected to think with grateful interest of that invention which turned literacy from a separate profession into Everyman's birthright."

These 16 essays, written in an enthusiastic and untechnical style, should readily stimulate these feelings for typography in the literate citizen.

Under "Typography As a Vocation" are the subjects of design and management, typography in art education, pride of craftsmanship, and training in taste. "Tradition and Progress" ranges over choice of type faces, typography of the Bible, and a typographical theory of verse.

Beatrice Warde, an American by birth, lives in England where she is publicity manager for the Monotype Corp., Ltd. of London. She is internationally known as an authority, connoisseur, lecturer and writer in her field of typography. In this volume she demonstrates her wide familiarity with the subject by giving theory, ideas and criticism of her own as well as those that she has absorbed from knowing the leading designers in the field.



Gifts for the Secretary

Q.—Is it good form to offer presents to the secretary of an executive who buys volume printing?

A.—There should be no objection to this provided the gift is not excessive and cannot possibly be understood as a bribe. By remembering the secretary's courtesy via a gift, you will stand out and be marked as deserving just a little bit more attention and, perhaps, some favor. But have the whole thing above board. It might be wise before making the gift to mention it to your principal, the executive. If you have his permission, communicate to the secretary that she will not be compromised in any way. Keep it at this level-as a sort of family affair-and it will come off as hoped for, with good will and without any ill effects.

Will Anti-Prejudice Hurt Sales?

Q.—Our plant employs people of varying nationalities. I myself am a member of a minority group in my community. Leaders of this group want me to join them in an all-out battle against discrimination practiced in my community. My feeling is that this is a good cause, but if I

Printing salesmen interested in having Mr. Irving Sherman, who prepares material in this department, answer special questions, may address him in care of The Inland Printer.

accept the invitation I may find myself battling against people upon whose good will my firm and I depend. What do you advise?

A.—Your case offers an instance when it is far easier to give advice than to take it. You may anticipate two effects should you decide to accept this chore: (a) Your community will admire you for your guts and show it concretely, (b) your act will be interpreted as a transgression against the community which will react adversely.

If the first effect is true, you will have little to worry about, unless you get too zealous and things get out of hand. Should the second effect transpire—watch out!

Ultimately, it's a matter between your conscience and yourself. Yet ask yourself the following pertinent questions: Will any gain in the stand of your group be worth the risk of endangering your family's and your own peace of mind, not to mention livelihood? Is the course recom-

mended to you the only one open to your group? Is it possible that extremists, more interested in fights than in victories, have the upper hand in the group, and are ready to sacrifice anybody and anything so long as they do raise a little dust?

It is not suggested that there be rationalizations; it is suggested that there be full clarity. Social abuses should never be glossed over; economically as well as socially they are destructive. Yet how often, instead of alleviating miseries, misguided individuals and groups serve only to deepen them by meddling.

Here's the main point: If you feel the issue is as desperate as shown, and what you are asked to participate in is imperative and will not be temporized, then it is clearly before you. You'll have to say "yes" or "no" and take your chances with your community or your conscience.

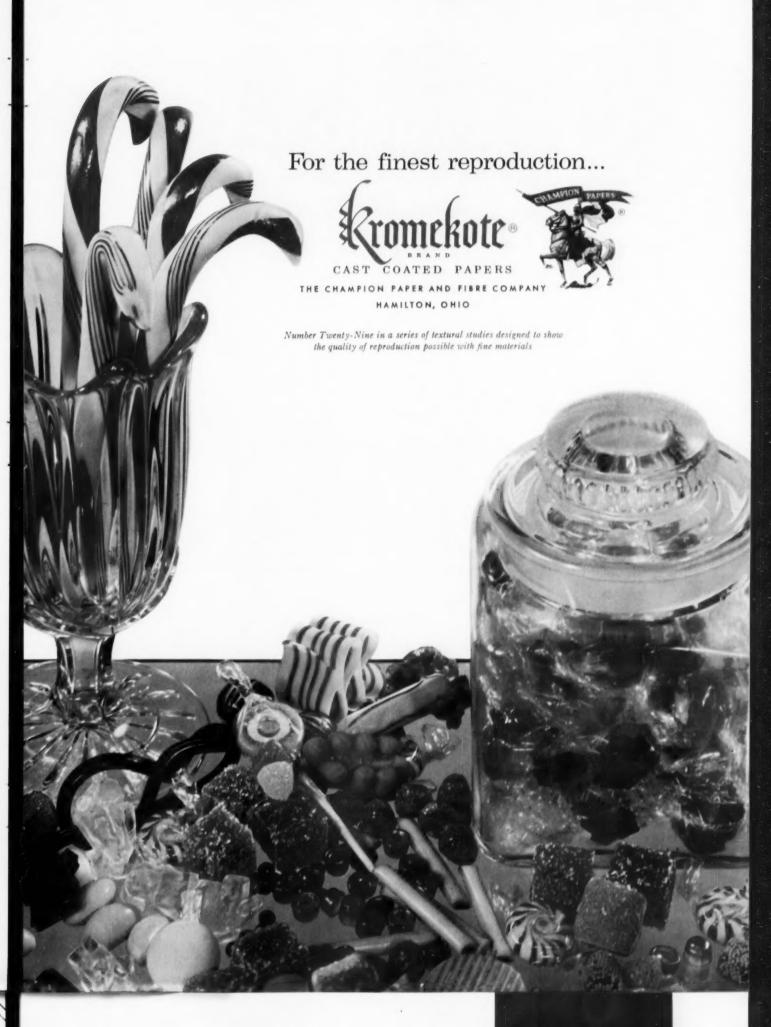
How to Refuse a Customer

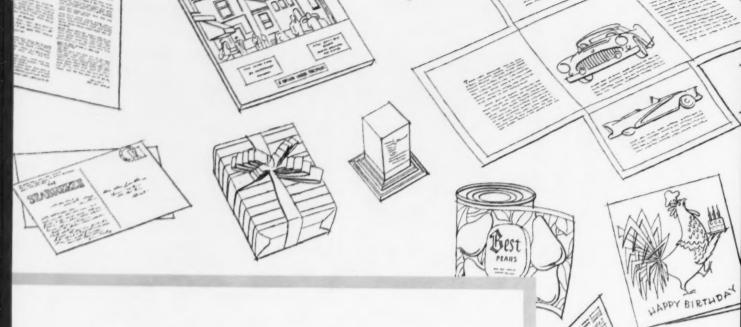
Q.—I have been asked to join a club by one of my accounts. I have absolutely nothing in common with the members of this club. My problem is: How do I refuse without insulting the customer?

A .- This is ticklish business. The best approach is to plead other commitments. Try the following: "When a man like yourself, whom I have known only as a business contact, invites me to join an intimate circle, to become, in fact, one of his friends, then I feel that I have reached a high point in my work. This is why I feel so badly because I am so involved in a lot of organizations that take most of my leisure time. It's my hard luck that your invitation comes at a time when I have very little extra freedom. I hope you will keep the invitation open. One of these days I'll find the time I want and then if you and your friends still want me, all you'll have to do is give me the sign and I'll be in."

Here's an interesting blotter used by the Sheldon Press in Burlington, Vt., to announce to customers that the plant has been moved to new address. Original was in brown and green link on yellow stock 9x4 inches. Mr. and Mrs. Warren R. Horn revived dying business, brought it to success. (See April 1P, page 46.)







Buy and Specify these Papers by Name

COATED BOOK

Satin Proof Enamel®
Refold Enamel
Falcon Enamel
Format® Enamel
Wedgwood® Coated Offset
Templar® Coated Offset
Javelin Coated Offset
All Purpose Litho

CAST COATED PAPER

Kromekote® Ename!
Kromekote® Labe!
Kromekote® Cover
(Cast Coated 1 Side)
Kromekote® Cover
(Cast Coated 2 Sides)
Kromekote® Postcard
(Cast Coated 1 Side)
Kromekote® Postcard
(Cast Coated 2 Sides)
Kromekote® Box Wrap

DRUM FINISHED PAPER

Colorcast® Box Wrap Colorcast® Gift Wrap Colorcast® Label

COATED COVER

Refold Coated Cover

DULL COATED BOOK

Cashmere Dull Enamel

UNCOATED BOOK

Garamond® Antique Garamond® English Finish Garamond® Text (W. M.) Wedgwood® Offset Pasadena Offset Chalice® Opaque

UNCOATED COVER

Ariel Cover Cordwain® Cover Chalice® Opaque Cover

ENVELOPE PAPER

Chamfico® Colored Wove Envelope Radiant White Envelope Foldur® Kraft Envelope Gray Kraft Envelope Suntan® Kraft Envelope Ne'er Tear Envelope

COATED POST CARD

Campaign Postcard Chamois Dullcoat Postcard

BRISTOLS

Inventory® Index
Canton® Postcard

TAG

Tuf-Tear® Tag

BOND, MIMEOGRAPH

Ariel Bond Scriptic Mimeograph

PAPETERIE

Wedgwood® Papeterie Garamond® Papeterie (Embossed and Printed)

PRESSBOARD

Champion Pressboard Imitation Pressboard

SPECIALS

Cigarette Cup Stock Food Container Stock Coffee Bag Tablet Papers Drawing Papers Red Patch Stock Stencil Board Pattern Board End Leaf Paper

THE CHAMPION PAPER AND FIBRE CO.

General Office: Hamilton, Ohio

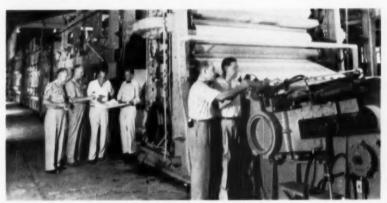
Mills of HAMILTON, OHIO . . . CANTON, N. C. . . . PASADENA, TEXAS

For full information on how this advertisement was produced, write our Advertising Department, Hamilton, Ohio





Thoroughly enjoying their task of judging entries at PIA's Washington, D.C., headquarters, submitted in the first printing exhibit staged by Kentucky printers under the sponsorship of the Louisville Graphic Arts Association are (l. to r.) Peter Becker, Jr., Arrow Press; Edward J. McArdle of McArdle Printing Co., and George A. Lohr of George Lohr Studios. More than 140 awards were given



With the new paper machine which will double capacity at Beckett Paper Co., Hamilton, Ohio, are (I. to r.) B. J. Tillmann, sales manager; Valentine Friedrich, Jr., vice-president; Guy Beckett, president; William Beckett, vice-president; George Lydick, engineer; Harold Leighton, superintendent

Officers of the Graphic Arts Association of Washington, D.C. who were elected recently at the 42nd annual meeting are David Porterfield, Jr., Arrow Service, treasurer; Ralph Dewhirst, American Printing Co., vice-president; John S. Beckham, Newspaper Printers Corp., president; George P. Mallonee, executive secretary, and Clarence E. Harlowe, Harlowe Typography, Inc., recording secretary





Devoted to timely items concerning men and events associated with printing. Copy must reach editor by 13th of month preceding issue date

PIA Ratio Study Shows Static '55-'56 Profit Level

Printing Industry of America's 1955-56 ratio study covering operations and financial status of 759 printing and allied trade firms shows profit continuing at the previous year's low level despite higher sales.

Reports came from 654 letterpress and offset companies whose sales volume added up to \$408-million. Over-all sales increase for firms rated as predominantly letterpress was 8.38 per cent. Offset volume was up 10.59 per cent.

Profit before federal taxes for 505 firms which accounted for 91 per cent of total sales volume was 6.11 per cent of sales, down 0.38 per cent from the previous year's figure. But profit after taxes, 3.47 per cent, was the same as for the previous year because taxes were lower. They dropped from 3.02 to 2.64 per cent.

PIA's Bulletin notes this encouraging development:

"Nearly one-fourth of the reporting plants large and small show profit more than double that of the average of the group, indicating highly efficient management. Superior management skill is clearly demonstrated in a table showing the sales and expenses of 151 plants, nearly one-fourth of all reporting plants, with profits on sales of 12.82 per cent. That size is not necessarily the determining factor in efficient management is proved by the fact that more than half of these well-managed plants had sales volume of less than \$300,000, and another one-fourth had less than \$1-million in sales."

Among the ratio study reports came 108 or 14 per cent from New York Employing Printers Association, Don H. Taylor president. Henry Henneberg, general manager, Printing Industries Association, Inc., Los Angeles, turned in 65, second largest number. Reports from William J. Keating, executive secretary, Printing Industry of Connecticut, Inc., scored the largest membership partcipation rate, 60.3 per cent. Highest percentage of membership participation increase over the previous year was achieved by Graphic Arts Association of British Co-Iumbia, Vancouver, Audrey Andrew, executive secretary.



The new Washington, D.C., Chapter officers of the American Institute of Graphic Arts are (I. to r., standing) Frank H. Mortimer, Government Printing Office, secretary; George Kennedy, R. P. Andrews Co., membership committee chairman; Calumbus S. Barber, Lewis Hotel Training School, treasurer; (seated) Irvin Wensink, Banta Publ. Co., president, and Arch Mercey, Ransdell Inc., vice-president



Mergenthaler Linotype agencies in San Francisco and Los Angeles moved during recent months into new, especially designed, ultramodern buildings. Above is the Los Angeles building at 1212 Albany St. The San Francisco building, smaller and somewhat less pretentious, is located at 155 Twelfth Street

At the New York Club of Printing House Craftsmen September meeting were (seated, I. to r.) Michael R. Stevens, John E. Weiss & Son, past president; the speaker on cold type, Howard N. King, Intertype Corp. typographic consultant, Graphic Services, York, Pa. photosetting house, International past president; Kendal Slade, Densen Banner Co., president; speaker James V. Elliott, Typographers Association of New York, executive secretary; Ferd Voilland, Jr., State Printer of Kansas, International vice-president and (standing) Charles J. Felten, Messenger of the Sacred Heart, first vice-president; Ed Blank, Publishers Printing-Rogers Kellogg Corp., post president; Wayne V. Harsha, editor, The Inland Printer; Henry A. Schneider, Charles Francis Press, New York past president, past International third vice-president; Charles E. Kennedy, Southern Printing School and president, International Graphic Arts Education Association, and Sydney Smith of Rathbun & Bird Co., secretary



Ad Typography Slide Film Being Prepared by ATAA

A color slide film on advertising typography is due for first showing early next year. Advertising Typographers Association of America members approved the script at their 30th annual convention Sept. 19-22 in Forest Hills Hotel, Franconia, N.H. Also featuring the parley was a display of job tickets and related forms used by member firms for scheduling and controlling production flow.

Walter T. Armstrong was reëlected president. He heads Walter T. Armstrong Co., Philadelphia. Named to continue serving with him were Harvey Willens, George Willens & Co., Detroit, vice-president, and Mrs. E. W. Shaefer, Tri-





W. T. Armstrong

Glenn C. Compton

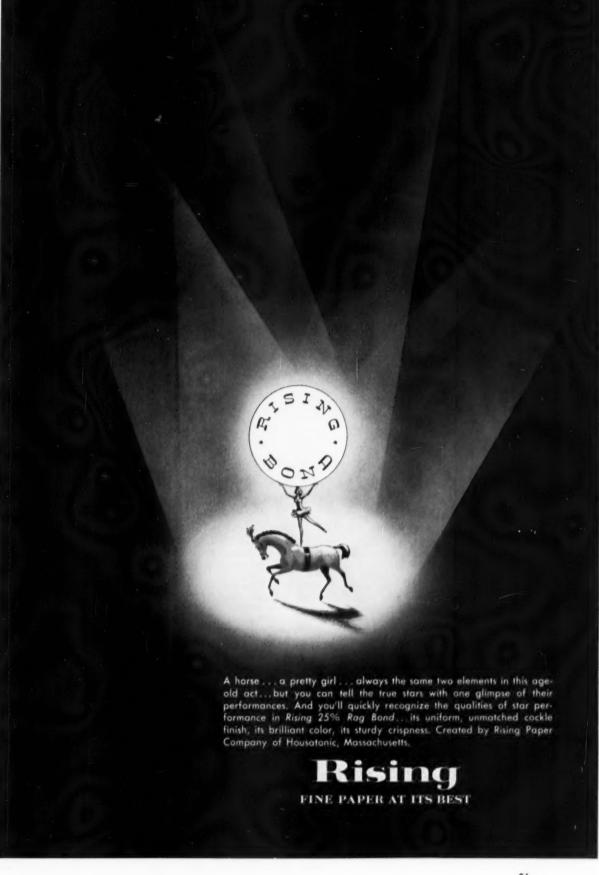
Arts Press, New York City, treasurer. Glenn C. Compton is executive secretary. E. G. Johnson, J. M. Bundscho, Inc., Chicago, a past president and for many years a director, was elected an honorary life member of the board. His firm is a charter member.

New three-year directors are Anthony Perrusi, Advertising Agencies Service Co., New York City; Frank Sturner, J. M. Bundscho, Inc., and William E. Trevett, Cooper & Beatty, Ltd., Toronto, Canada.

Other directors are Hubert J. Echele, Warwick Typographers, Inc., St. Louis; Jack Miller, Kurt H. Volk, Inc., New York City; Bernard Ryan, Typographic Service Co., New York; T. L. Jaggars, Jaggars-Chiles-Stovall, Inc., Dallas, Tex.; Claire J. Mahoney of Claire J. Mahoney Co., Kalamazoo, Mich., and Robert Schmidt, Frederick W. Schmidt, Inc., New York.

Gravure Expert Dultgen Dies

Arthur Dultgen, inventor of the Dultgen halftone rotogravure printing process used in producing magazines, Sunday newspaper supplements, paper box and cellophane packaging, died recently in Amityville, Long Island, N.Y., at the age of 85. At one time, he operated his own photogravure plant. Then he became plant superintendent for Neo Gravure Co. and Van Dyck Gravure Co. From 1936 until he retired about five years ago, he was superintendent of the color rotogravure plant of New York Daily News.





Officers and Executive committee members of the American Photoengravers Association are (seated, I. to r.) W. K. James, secretary-treasurer; R. C. Walker, president; E. B. Brooks, first vice-president, and D. H. Murnik, second vice-president. Standing are W. J. Kletzker, George J. Pfannenstiehl, Harold M. Towne, C. G. Rohrich, Kenneth E. Cooley, Arthur Meidling; Harry E. Collins is not pictured



Paul O'Neill and Edward Heckelman, representing 900 employees of Rand McNally & Co., Hammond, Ind., present a plaque commemorating firm's centennial to its president, Andrew McNally III (right)

Watching progress on Minnesota Mining & Mfg. Co.'s new graphic products laboratory to be completed in the summer of 1957 near St. Paul, Minn., are (left to right) Roy R. McKenzie, group engineer; Bert S. Cross, graphic products vice-president; Ed J. Kane, printing products general manager; and Cliff L. Jewett, printing products technical director. The building will contain 85,000 square feet and is the beginning step in consolidating all the research activities of the graphic products group



Photoengravers Highlight Letterpress Research Need

Plans were initiated at the 60th annual convention of the American Photoengravers Association, Oct. 8-10, in Detroit, Mich., for the formation of a separate and

independent research and development organization for all branches of letterpress printing. In addition to 996 registered persons, several hundred Detroit craftsmen heard speeches and viewed exhibits.

The realignment of officers unanimously elected during the business sessions is R. C. Walker, Tulsa, Okla., president; E. Bartlett Brooks, Dayton, Ohio, first vice-president; D. H. Murnik, Oakland, Calif., second vice-president, and W. K. James, Philadelphia, secretary-treasurer.

"Working Together to Keep Letterpress Rolling" was the title of the address presented by Elmer M. Schwartz, president of the International Association of Electrotypers and Stereotypers, Inc. His talk demonstrated that closer coöperation between electrotypers and photoengravers will better serve letterpress printing.

Ten research organizations applying the technology of four nations on two continents believe that photoengraving will become more competitive and a better process to serve letterpress printing through the adoption of electronic devices. So said J. A. V. Hyatt, Fairchild Graphic Equipment, Inc., in his talk entitled "The Accomplishment and Promise of Electronics in Photoengraving."

Powderless etching of copper was announced as a reality by Dr. Marvin C. Rogers, research director of R. R. Donnelley & Sons Co., Chicago, who spoke on "Research Really Does Get Results."

Cost accounting was discussed by C. A. Bostwick, director of the cost accounting and statistical department of APA. He reported that more photoengravers are using up to date accounting procedures.

The advantage to national advertisers of "The Combination Letterpress and Gravure Plant" was portrayed by Myron Homiak, vice-president in charge of the gravure division of Collins, Miller & Hutchings, Inc.

A new and revolutionary method of press dress, particularly for the carton and paper-box customer, was unfolded by Frank A. Freeman, manager of the Chicago manufacturing branch of Western Newspaper Union, in his address entitled "Magnesium Mounted Plastic Plates for Letterpress Color Printing."

The need for a letterpress research and development organization, patterned after the Lithographic Technical Foundation, was portrayed by Frank J. Schreiber, executive secretary of the American Photoengravers Association.

Etching control of all photoengravers' metals, including the powderless etching

of magnesium and zinc was presented by Donald B. Alnutt of the graphic arts research department of Philip A. Hunt Co.

"Candid Views of a Letterpress-Offset Man," by Robert VanderKloot, president of Detroit Colortype Co., stressed "salesmanship" from the buyer's point of view.

Wilfrid T. Connel, president of the International Photoengravers Union of North America, pledged continued cooperation with employers and support of the plan initiated by the association for the letterpress research program.

"Electrofax Photo-Resist Makes Exposure by Projection Printing a Possibility" was presented by Harold G. Greig of the research staff of the Radio Corporation of America. He reported that it is beyond the laboratory stage, but not yet available.

A panel discussed "Today's Goal—the Controlled Negative," from camera, lens, copyboard, lighting, film, developer, fixing and all of its processing through the darkroom up to and including the print on metal. Charles A. Powers, secretary-treasurer of Powers Photoengraving Co., acted as moderator.

A series of technical reports were read to conclude the convention. Topics of these papers included contact screens, the Dow-etch process, magnesium originals, the Acme etching process, color correction, and plate mounting.

The 61st annual convention and exhibition is scheduled for Oct. 14-17, 1957, in Philadelphia.

M. J. Goger, ATF Head, Died in Bermuda Oct. 22

Milton J. Goger, president of American Type Founders, died suddenly of a heart attack on Oct. 22 while in Bermuda.

Mr. Goger was born 49 years ago in Elizabeth, N.J., headquarters city of the ATF company which he served 31 years. He was 18 when he joined ATF in 1925. From his first position as a machinist's helper in the manufacturing di-



Milton J. Goger

vision, he rose through the ranks to become supervisor of branch accounting, assistant to the controller and then assistant to the president. He was vicepresident and secretary-treasurer when he was named president on Apr. 6 of this year. In the presidential post, he succeeded Louis C. Edgar, Jr., and directed the company's expansion program.

He was graduated from Pace Institute School of Accounting and Business Administration in 1936, and from Columbia University Graduate School of Business

International Graphic Arts Show To Be Held in Switzerland in 1957

Lausanne, Switzerland, will be the site of the International Exhibition Graphic 57 next year from June 1-16. Printing industries and allied trades will be represented from all over the world in exhibits covering an area of 440,000 square feet. Exhibitions will include machinery, photography, binding, paper, and office organization. All machinery and material will be imported free of customs duty.

Also scheduled in Lausanne from June 3-8 will be the International Congress of Printing Industries and Allied Trades, organized every three years by the Inter-

national Office of the Printing Industries and Allied Trades, London. Technical conferences, social events and excursions are on the program.

P. J. Massey, Paper Expert, Dies

Peter J. Massey, a paper company consultant, died recently in Rochester, Minn., at the age of 73. He was the inventor of a machine coating process that produced high quality enamel papers at low cost. His process eliminated costly operations and provided simultaneous two-sided coating at high speed. Mr. Massey had been general manager of several printing and paper companies.



Joseph L. Baarlaer ITCA President; Sherman Retires

Joseph L. Baarlaer of Cincinnati succeeded Harold R. Dantuma of Chicago as president of the International Typographic Composition Association at the annual convention, Oct. 11-13, in Toronto. Frank M. Sherman retired as executive secretary and William E. Switzer was named to succeed him. Mr. Switzer has been Mr. Sherman's assistant for the past year.

New first vice-president is Frank Lightbown of Boston; second vice-president is Walter Adamson of Toronto. John W. Shields of Bridgeport, Conn., continues as treasurer.

New regional vice-presidents are Harry Slabin, Boston, Northeastern; Alfred Olsen, Albany, Mid-Atlantic; Alfred Hoflund, Denver, Western; William Yarbro, Oklahoma City, Southwestern; Robert Willison, Los Angeles, Pacific Coast; Ronnie Jackson, Montreal, Canadian. Newly created vice-presidents include Gale Libby of St. Paul, Central States, and Sol Cantor, New York City, Metropolitan New York.







Frank Lightbown

Arthur Tichenor, chairman of the IT-CA Accounting Commission, reported on a survey of accounting machines among member firms. Charles Magee, Cooper and Beatty, Toronto, described his firm's use of the Burroughs Sensimatic machine.

W. L. Head of the Canadian Underwriters Association analyzed the problem of "Insuring the Life of Your Business." The convention initiated a study of group insurance plans.



W. E. Switzer



Frank M. Sherman

Herbert O'Sullivan, Mergenthaler Linotype Co., described the Linofilm system of four units: keyboard, photographic, corrector and composer. Field tests of the Linofilm are now being conducted, Mr. O'Sullivan reported.

Leo Robertson, Lanston Monotype Machine Co., announced that the Monophoto is now commercially available and that demonstrations are being held at the factory in Philadelphia. The Monophoto is built by the English Monotype company.

In his chairman's report of the phototypesetting section of ITCA, Jack Trevett of Toronto recounted the accomplishments of his section and emphasized that efforts to set up standards of production are directed toward eliminating "unrealistic and inadequate" costing practices.

James Elliott of the New York Employing Printers Association reported that preliminary results of a keystrokes-perhour study will soon be published and asked for nationwide coöperation.

Mead Purchases Land in South

The Mead Corp., Dayton, Ohio, has purchased a plant site of 1,000 acres on the Savannah River in South Carolina. Plans for use of this land have not yet been announced.



If it's big production you want, here's your answer . . . the new, improved N-D Combination Feeder-Perforator-Jogger assembly that sets you up to turn out really big valume F.A.5-TI The all-new striker mechanism is the most positive ever devised for a slot hole perforator, and allows a speed increase of MORE THAN 30% on strike work over any other N-D perforator ever built. And it's os simple, so COMPLETELY AUTOMATIC one operator can easily handle 2 such set-ups. The Perforator connected between the Feeder and the Jogger is the new precision 30", 36", 42" or 45" model. Produces 7,500 SHEETS PER HOUR on straight-run work, 17x22 sheet, with proportionate speeds on other sizes. Sheets delivered ready for packaging. It's great unit . . . a remarkable production builder. By all means, check into it.

Write today for latest literature!

NYGREN - DAHLY COMPANY

Chauncey H. Griffith Dies: Noted Typographic Expert

Chauncey H. Griffith's death, which came unexpectedly on Oct. 7 at his country home in Butler, N.J., removed from



Chauncey H. Griffith

the printing world one of its greatest typographic experts. Born 77 years ago in Sherritts, Ohio, he was one of seven brothers, most of whom were active in the graphic arts. Through his early years he was a skilled printer and

a Linotype "swift," working in many Southern commercial and newspaper plants. Becoming a salesman for Linotype's New Orleans agency when he was 27, he quickly worked his way up to sales manager and then assistant to the president. All this was prelude to his more than 20 years of service as Mergenthaler's typographic development vice-president.

From that post, he gave newspapers body types for high-speed printing, brought to book publishers the economies of mechanical typesetting, launched a series of American classic faces, and put Oriental scripts on the linecaster. He retired from active duties in 1949, but continued his service as a consultant to Linotype and its overseas subsidiaries. His advice was sought from all over the world.

Mr. Griffith introduced Ionic No. 5 in 1926. Directing its development was his prime function, but he actually worked on its drawing board phase. This first body type designed specifically for newspapers eliminated ink traps, allowed for the distortion of stereotype shrinkage, and printed cleanly on rotary presses. From this face grew a whole Griffith hallmarked family—Excelsior, Opticon, Paragon, and Corona.

He persuaded publishers of fine American books to set type mechanically. For typographic resources he directed the cutting of Granjon, Baskerville, Janson and Monticello, all refinements of basic classic faces.

It was Mr. Griffith who induced William Addison Dwiggins and Rudolph Ruzicka, both of whom had made solid reputations in other fields, to become designers for Linotype. First Dwiggins faces were the Metro series, which made him a leader in his new field. His correspondence with Mr. Griffith during the creation of the Metros was compiled and annotated by the latter and presented to the University of Kentucky library. The Atlanta, Ga., library has a smaller collection.

Mr. Ruzicka also achieved immediate success as a designer for Linotype. He and Mr. Dwiggins were American Institute of Graphic Arts gold medal winners. The Dwiggins faces, notably Caledonia and Electra, and Ruzicka's Fairfield and Primer, are the nucleus of what has been called the American classics of type.

Mr. Griffith's work with Oriental scripts opened vast fields of illiteracy to the influence of inexpensively produced printed material. Syriac was introduced in 1917. Then came Arabic, Hebrew, Turkish and Armenian, Hindi, Gujarati, Devanagari and Marathi, Bengali, Singhalese, Tamil and Urdu. All of these scripts raised acute mechanical problems which Mr. Griffith solved without compromising his typographic standards.

He worked with telephone company officials in preparing Bell Gothic, now used for some 90 per cent of all phone directories printed in Roman characters.

During World War II, the American government asked for material so prepared that every dialect between the China and California coasts could be Linotyped. Mr. Griffith, coöperating with the American Bible Society, with which he had worked for decades in preparing types for setting the Scriptures, supplied this government need on a forced-draft schedule.

During his Linotype tenure matrices were prepared for countless languages and dialects, so that some 900 may be set.

Vandercoek
Power 219
with Adjustable Bed and
Automatic
Tape Sheet
Delivery.
Mazimum
plate or form
size 18" x 24".
Maximum
speed, 500
proofs per



Why Waste High Priced Operator Energy On A Crank Handle?

Fast and completely power operated, the Vandercook Power 219 will pay for itself by giving you more production and better quality! The Vandercook Power 219, when equipped with the new Automatic Tape Sheet Delivery which returns the printed sheet to the operator at the feed board, is the most efficient test press for the production of 1 to 1000 proofs of the finest quality. Trade in your hand driven proof presses on modern high speed Power 219's. Write for information.

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323 E. 44th St., New York 17, N.Y. Phone: MUrray Hill 4-4197
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3156 Wilshire Blvd., Los Angeles 5, Calif. Phone: DUnkirk 8-9931 In Canada, Sears Limited PRINTERS SIPOULD MOUNT THEIR OWN PLATES!

DMAA Convention Speaker Forecasts All-Time High

November elections, however they turn out, will have only a minor effect on business over the nearby months, according to Paul T. Babson, president of United Business Service, Boston.

"This country is in a period of increasing population and expanding economy stimulated by an extraordinary amount of technological improvements in practically every field," said Mr. Babson at the Direct Mail Advertising Association's 39th annual parley in New York City. Under such conditions, he could not feel

other than optimistic about fall and winter business and the longer-term outlook for good quality common stocks.

He foresaw fourth quarter consumer spending and retail sales rising to an all-time high. "Business spending is also moving ahead," he said. "Tight money has not caused any appreciable reduction in the capital goods boom. Plant and equipment expenditures are heading for a new high level, with prices going up. Federal, state and local governments are planning larger outlays.

"Under the impact of these rising trends the American economy will surely forge ahead over the balance of this year. Gross national product, at the annual rate of \$408-billion, is likely to rise at least another \$10-billion."

DMAA's Oct. 1-3 "vote for direct mail" convention rolled up a new high registration record of 1,675. More than 80 suppliers of equipment, materials and services displayed their wares at Hotel Statler. Speakers, panelmen, circles of information and market place round tables covered all phases of direct mail business.

William Clawson, Harris-Seybold Co., presented certificates to 46 winners in the 1956 Direct Mail Leaders competition for campaigns achieving excellence in six basic direct mail functions. Hoffman-La Roche, Nutley, N.J., won the Gold Mail Box Award for the best-of-all campaign. The Henry Hoke Award, offered by the Reporter of Direct Mail Advertising for the best problem-solving campaign, was presented to Inland Steel Container Co., Chicago.

Charles V. Morris, Reinhold-Gould, Inc., and Samuel E. Gold, Lignum-Vitae Products Co., told how to work with words or "listen with a pencil" while writing modern letters. They appealed for making written material conform as closely as possible with the graphics of reproduction. They also stressed the writing craft's need for awareness of the worth of words properly used to sell merchandise, services and ideas.

DMAA's new three-year directors are Albert Buchanan, direct mail sales manager of Crowell-Collier Publishing Co.; Colin Campbell of Campbell-Ewald Co., Detroit; Robert B. Clark, Jr., advertising and sales promotion manager, Strathmore Paper Co.; William Lewis, direct mail division manager, E. I. du Pont de Nemours & Co.; Virginia Parsons of Parsons Associates, Dallas, Tex., and Robert Stone, National Research Bureau, Chicago. (See October IP, page 93, for new officers.)

Chicago Litho Institute Offers Offset Do-It-Yourself Course

An intensive daytime course in lithography is being offered by the Chicago Lithographic Institute starting Jan. 7, 1957. It will run six hours a day, five days a week for 12 weeks.

The course will require that each student process a two-color job from start to finish, doing all the work himself. This includes creating his own idea, furnishing art work, shooting copy, making layouts and stripping, preparing plates, running the job on the press, and performing all necessary finishing operations.

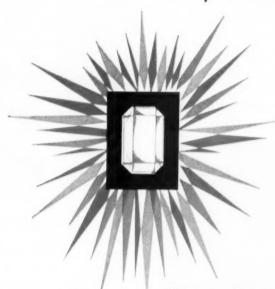
More information may be obtained from the institute at 1611 W. Adams St., Chicago, III.



THE Morrison COMPANY

125 W. Melvina Street, Milwaukee 12, Wis.

it's a perfect blue white!...
it's a real sparkler, too!...



... new, sparkling bright

EAGLE-A TROJAN BOND BLUE WHITE

Introducing . . . a new bond paper with a blue white brilliance that will give your printing a 100-carat look! It's Eagle-A Trojan Bond Blue White . . . a 25% rag content bond that's really outstanding for its bright blue white color, its opacity and printability. A fine choice for letterheads, office forms and direct mail, Trojan Bond Blue White comes in all regular substance weights and press sizes . . . and in envelopes-to-match. Write for an attractive portfolio of printed samples. Other papers in the Eagle-A Trojan line: Trojan Record, Trojan Onion Skin.



EAGLE - PAPERS

AMERICAN WRITING PAPER CORPORATION HOLYOKE, MASSACHUSETTS

Manufacturers of famous EAGLE-A COUPON BOND and other nationally-known Bonds • Onion Skins • Manifolds Ledgers • Bristols • Texts • Covers • Boxed Typewriter Papers • Technical, Industrial and Special Papers

R&E Council Approves Aid To Letterpress Development

The Research and Engineering Council of the Graphic Arts Industry has approved in principle the organization of a comprehensive letterpress research and development program. The executive committee in quarterly session at Grand Rapids, Minn., heard Frank Schreiber, executive secretary of the American Photoengravers Association, report results of a survey made to get expressions from industry leaders on the need for such a program. The committee endorsed APA's efforts, and the council has gone on record as being eager to assist by providing advisory

services in the preparation of the program, and by coordinating it with other current graphic arts research projects.

Pullman Press Discontinues Work

One more private printing plant has gone out of business. Printing operations of the Pullman Press, privately owned plant of the Pullman-Standard Car Mfg. Co. in Chicago, were discontinued Aug. 30 after 38 years of business. Pullman ticket work will be done by Rand Mc-Nally and other work will be let out on a bid basis, a company spokesman said. The plant had 35 employees, most of whom have been placed in other firms.

Clifton W. Whaling New Manager of Michigan GAA

Clifton W. Whaling has succeeded C. C. (Cy) Means as manager of the Graphic Arts Association of Michigan, Inc., with headquarters in Detroit. David M. Walker has been named assistant manager.

Mr. Whaling is a graduate of George Washington University and is a member of the bar of the District of Columbia and the State of Michigan as well as the U.S.







Clifton W. Whaling

Supreme Court. He served as a special agent of the FBI for several years, after which he became director of labor relations with Fabricon Products, specialty printers, with plants in Detroit, Bridgeport, Conn., Philadelphia, Pittsburgh, and Cleveland.

Mr. Whaling joined the GAAM staff in 1951 as assistant manager, handling labor relations for the Michigan area as well as managerial duties.

Mr. Walker entered the printing industry in 1929 after attending Michigan State University and Wayne University. A journeyman photoengraver, he has also spent several years in the lithographic field. He is a past president of the Detroit Club of Printing House Craftsmen and is secretary-treasurer of the Fifth District Craftsmen's Society. He joined GAAM as administrative assistant in 1952. He has been editor of several club and association publications, and among his other duties is production manager of Graphic. graphic arts industry promotion quarterly published by GAAM.

Heidelberg Trains Pressmen In Central and South America

Latest feature of Original Heidelberg's international public relations activities is a large-scale training program for pressmen and apprentices in Mexico, Costa Rica, Venezuela, Ecuador, Peru, Chile, and Uruguay.

Original Heidelberg letterpresses are used for giving pressmen theoretical and practical training in multicolor and solid printing, embossing, and die-cutting. Samples of each job produced are presented to the trainees. Forums and roundtable discussions deal with four-color letterpress printing, dry and wet no-offset spraying, and proper treatment of rollers.



Harris-Seybold Appoints Chief Of Web Offset Engineering

Thomas H. Johnson has been appointed by Harris-Seybold Co., Cleveland, Ohio, to the position of chief develop-

ment engineer for web offset presses at the company's subsidiary, the Cottrell Co., Westerly, R.I. He will be responsible for engineering development and sales engineering. Mr. Johnson has been in charge of web press engineering



Thomas H. Johnson

for Harris-Seybold in Cleveland since 1949. In addition to his offset press experience there, he has had 26 years of engineering and development experience on web presses.

Transferring with him are press engineers Anthony J. Mueller and John G. Sabas.

New President for Roberts & Porter

The new president of Roberts & Porter, Chicago, succeeding the late Hugh R. Adams, Jr., is Harry Grandt, formerly



Harry Grandt

vice-president and general sales manager. He joined the firm in 1925 and was made manager of the New York office in 1936. Mr. Grandt has travelled all over the United States, Canada and Mexico as a salesman for the company and has

made trips to Europe to investigate new developments in lithography. Serving with him are the newly elected officers, Herve W. Surrey, Sr., vice-president; Walter Mueller, treasurer, and Sam A. Rothermel, secretary.

New York's Guide-Kalkhoff-Burr, Inc. And Mail & Express Merge Plants

A merger of two New York City companies, Mail & Express Printing Co., Inc., and Guide-Kalkhoff-Burr, Inc., has been

Francis A. Young (left) confers with Charles E. Schatvet about the merger of their companies, Mail & Express Printing and Guide-Kalkhoff-Burr



announced. Francis A. Young, Sr., president of Mail & Express, has become board chairman of the latter company and Guide-Kalkhoff-Burr's president, Charles E. Schatvet, is now vice-president of the former company.

The combination of their offset and letterpress facilities, along with newly acquired offset space, totals 50 letterpress and offset presses, 18 composing machines and a complete bindery.

Turner Moves to Larger Quarters

The ONLY system that can be

re-racked ON THE PRESS!

Holds "down" time to an

absolute minimum!

Turner Printing Machinery, Inc., has changed the location of its Detroit office to 6327 Linwood. The new building is twice the size of the former one.

lke Pays Tribute to Printing On National Newspaper Week

President Eisenhower paid tribute to printing as one of mankind's greatest inventions when he addressed a message to the committee sponsoring national observance of 500 years of progress through printing which marked National Newspaper Week Oct. 1-8.

He emphasized the role played by printing and printing presses as servants spreading knowledge and furthering truth, freedom, justice and democracy.

Newspapers nationwide published special editorial matter, sections and supplements covering the graphic arts industry.



The Wesel BULL DOG hooks lock against racks and absorb all stresses that in other systems must be taken up by the parent metal itself. Consequently, the Wesel Final Plate Mounting System outlasts all others. The fact that re-racking can be done on the press holds "down" time to an absolute minimum. Order your new press Wesel-equipped or ask us about converting your present equipment.



Winners Listed in 16th Survey of Annual Reports

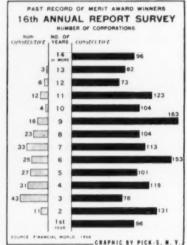
From 5,000 entries in Financial World's 16th survey of annual reports, 1.770 were rated as deserving merit awards. W. Sturgis Macomber, president, New York Society of Security Analysts, headed the committee charged with selecting winners of bronze trophies in one hundred industrial classifications. These and winners of special awards for best annual report advertisements, post-meeting reports, and security analyst yearbooks were honored at the annual banquet Oct. 29 at Hotel Statler, New York.

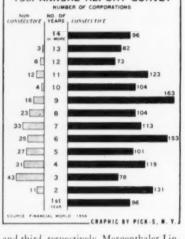
Graphic arts top winner was Brown & Bigelow, St. Paul, Minn. Kingsport Press, Inc., Kingsport, Tenn., scored second best, General Outdoor Advertising, Chicago,

Winners in the pulp and paper bracket were Crown Zellerbach Corp., San Francisco, first; St. Lawrence Corp., Ltd., Montreal, Canada, second; St. Regis Paper Co., New York City, third.

Bronze award for the best report in the publishing field went to Southam Co., Ltd., Montreal, Runner-up entries came from Meredith Publishing Co., Des Moines, Iowa, and Time, Inc.

Haloid Co. won highest honors in the photo equipment class, with Eastman Kodak Co. and Bell & Howell Co. second





and third, respectively. Mergenthaler Linotype's report was third best in the light machinery field. Interchemical Corp. won third place in the chemical product group. Best paper products report was issued by Scott Paper Co., Chester, Pa. General Electric Co. issued the best of all industry printed report of shareholder annual

An increasing number of corporate managements are producing well-balanced reports serving both unsophisticated stockholders and professional investment opinion leaders, according to Weston Smith, awards consultant. He pointed out that while the front sections of such reports are "humanized for general readers, the trend is toward more statistics at the back for security analysts and investment advisers."

Ninety-six companies were presented with merit awards for the first time, and 478 have achieved this distinction for ten or more consecutive years. Listed on a new honor roll are 96 companies that have won awards for 14 or more years.

Advertising Show in New York

The Fifth Annual Advertising Essentials Show, subtitled "the showcase of advertising progress" by its sponsor, Advertising Trades Institute, is dated for Nov. 19-21 in New York City, Attendance of advertising, sales promotion, and marketing executives is expected to exceed last year's 12,700 total. Thomas B. Noble, Institute chairman, forecasts more than 100 exhibits of latest advertising communication and sales promotion materials, together with graphic arts services, paper, and allied products.



STOP OFFSET SPRAY MATERIALS

POWDERS-Compounded especially for anti-offset especially for anti-offset sprays. Pure vegetable com-pound—no minerals or grit. Free flowing and moisture resistant. Available in con-trolled particle sixes for any

LIQUID-Available in light, medium, heavy, and extra heavy grades. Non-inflammable, non-toxic, nonabrasive. Won't fre . non-settling

"Printer Design" Tailor-Made for the Individual Press. One simple adjustment-normally set in 3 seconds-provides a dependable, fullcoverage, controlled dry spray that definitely prevents offset . . . turns out a better printing job faster. Regardless of the size of your shop; the make of press in service, or the type of printing in which you may specialize, OMC has a specific

· Only one finger-tip setting for positive control

· Complete air operation . . . no moving parts

model of Stop Offset dry spray equipment to fit your needs. Nearly 10,000 shops the world over are equipped with OMC stop offset spray equipment. This

is proof positive of absolute dependability. Available thru leading Graphic Arts suppliers. Write for FREE folders and literature describing in detail OMC Stop Offset equipment.

NEW . . . CLEAN . . . LOW PRESSURE OMC LIQUID SPRAYER

True LOW PRESSURE . Easily adaptable . Adjustable Pattern . Definitely Cleaner

Adjustable Pattern • Denniely Creater IMPROVED . . . to give Clean, dependable performance at true LOW PRESSURE . . . only a low 12 pounds air pressure required for full coverage spray pattern! All you do with an OMC Liquid Spray Unit is set it and forget it. Eight efficient models available for any size press, plus essential accessories for greater efficiency. Write essential accessories for greater efficiency. Write for new, descriptive folder giving complete details.





ORTMAN MCCAIN COMPANY

Specialists in Offset Stopping Equipment 1329 West Washington Blvd. . Chicago 7, Illinois



Full speed splicing saves time!

The Hoe Reel, Tension and Paster offers you push button newsprint splicing. Its running belt system insures accurate tension control at all times.

Splices can be made at all press speeds and over a wide range of roll diameters. An electric eye arrangement pioneered and perfected by HOE stops the new roll in a definite, predetermined position relative to the expiring web, insuring accurate pasting position. And, since the running belt tension is connected to the press drive, the new roll is accurately brought up to synchronous speed of the expiring web regardless of roll diameter or press speed.

Refinements like these make for consistently successful splices. And they illustrate the combination of creative engineering and practical mechanical application that makes HOE equipment so popular with the men who run the press.



910 East 138th Street, New York 54, N. Y. BRANCHES, BOSTON . CHICAGO . SAN BRANCISCO



BUILT TO PRINT BY LETTERPRESS. OFFSET OR MULTILITH IDEAL FOR CATALOGUES, FORMS, BROADSIDES AND LETTERHEADS STRONG - OPAQUE - BRILLIANT -ONE FINISH FOR MANY JOBS

> STOCKED IN WRITING AND BOOK PAPER SIZES—16# AND 20# BASIS WHITE ONLY

> > MANUFACTURED BY



PAPER COMPANY ALPENA, MICHIGAN

OPEN GEAR MARLA SPRAY LUBRICANT



Use on all Gears not running in Oil STICKS TO METAL Absolutely Nothing Else Like Itl OUTLASTS ORDINARY LUBES 5-to-1

- ECONOMICAL—Spray container reduces lubrication time. Long lasting film. One can covers approximately 25 sq. ft. of surface with no waste.
- HEAVY DUTY—The finest extreme pres-aure adhesive lubricant there is for open gears.
- EASY-TO-USE-No fuss . . . no muss.
 Ease of application encourages and as-aures complete lubrication of open gears.

- 4. CLEAN—No drip . . . no throw off . . . no clean up of excess lubricant, Will not drip in hot or steamy areas.

 5. SPRAY—Assures perfect lubrication even to the most hard-to-get-at areas.

 6. HANDY—Maria Spray Lubricant can be carried easily and is always ready for use. Eliminates the breash, paddis or any use. Eliminates the brush, paddle or any pre-heating.
 7. VERSATILE—A superior lubricant also
- for cams, reciprocating actions, mon-rails, guides, chains, sprockets and cables

Prices F.O.B. Case of Six-12-ounce Cans......\$10.74 Case of Twelve—12-ounce Cans...... 21.00

JOBBER INQUIRIES INVITED. MFG. AND GUARANTEED BY

ROTHLAN CORP. 3618 Laclede A St. Louis 8, Mo.

3618 Laclede Ave.

CONVENTIONS

National Flexible Packaging Assn., annual convention, Biltmore Hotel, New York, Dec. 4-6. American Vocational Assn., graphic arts session, Krel Auditorium, St. Louis, Mo., Dec. 6.

IANUARY

Great Lakes Newspaper Mechanical Conference,

Great Lakes Newspaper Sectionical Conference, Statler Hotel, Cleveland, Jan. 13-15. International Printing Week, Jan. 13-19. Plant Maintenance & Engineering show and conference, Cleveland Public Auditorium, Cleve-

land, Ian. 28-31. Top Management Conference-Printing Industry of America, Hollywood Beach Hotel, Hollywood, Fla., Jan. 28-Feb. 1.

FEBRUARY Northwest Mechanical Conference, Hotel St. Paul, St. Paul, Minn., Feb. 16-18.

MARCH

Gravure Technical Assn., annual convention, Drake Hotel, Chicago, March 6-8. Southern Newspaper Publishers' Assn. (Western Div.), mechanical conference, Hotel Galvez, Gal-

weston, Tex., March 10-12.

Mid-Atlantic Newspaper Mechanical Conference, Sheraton Hotel, Philadelphia, March 21-23. Printing Industry of America, board meeting, New Orleans, La., March 24-27. National Paper Trade Assn., Waldorf Astoria

Hotel, New York, March 25-27. Folding Paper Box Assn. of America, annual

convention, Drake Hotel, Chicago, March 31-

Lithographers National Assn., annual conven-tion, The Greenbrier, White Sulphur Springs, W.

Va., April 1-3. Southern Graphic Arts Assn., annual conven-tion & exhibit, Battle House, Mobile, Ala., April

National Packaging Exposition of American Management Assn., International Amphitheatre, Chicago, April 8-11.

International Assn. of Electrotypers & Stereo-typers, spring technical conference and exhibition, Statler Hotel, Buffalo, N.Y., April 10-11.

MAY

National Assn. of Litho Clubs, annual conven-

tion, Palmer House, Chicago, May 2-4.
Technical Assn. of the Graphic Arts, annual technical meeting, Benjamin Franklin Hotel, Philadelphia, May 13-15.

Philadelphia, May 15-15.
Research and Engineering Council of the Graphic Arts Industry, annual meeting, Benjamin Franklin Hotel, Philadelphia, May 15-17.
Technical Assn. of the Pulp & Paper Industry, annual conference, Milwaukee, May 20-23.

Greeting Card Convention Featured New Equipment

Featuring the Greeting Card Association's 15th annual convention Sept. 26-27 at the Hotel Roosevelt, New York City, was an exhibition of the latest developments in equipment, services and materials.

The Macey Co., subsidiary of Harris-Seybold Co., displayed the new Macey Model "G" high-speed machine for gathering book sections and folios, greeting cards, gift wrapping paper, and patterns.

Wrightson Christopher of Rust Craft Publishers, is the association's president, with Harry M. Messenger of Messenger Corp., vice-president, and Lillie Fishman, Brownie's Blockprints, Inc., treasurer.

DO YOU KNOW THAT...

A. J. FALICK has left Webb-Linn Printing Co., Chicago, to become president of Murray & Gee, Inc., printers in Culver City, Calif. He replaces ROBERT RASMUS, retired. CAROLYN WEBER FALICK, secretary-treasurer, replaces PIO VENTURELLI who is now vice-president.

DEAN R. KAUFFMAN has set up Signature Press, Inc., 129 Lafayette St., New York City, for specializing in point-of-sale and advertising printing.

FRANK J. SCHAEFER, formerly Snyder and Black plant superintendent, is liaison man between sales and production departments of Consolidated Lithographing Corp., Carle Place, Long Island, N.Y.

J. A. PETREQUIN has been appointed sales manager of Buehler Printcraft Corp., Cleveland, Ohio.

PAUL L. BROWN has been elected vicepresident in charge of advertising and sales promotion of the Bodine Printing Co., Inc., Michigan City, Ind. HOBART C. CARTER has been elected vice-president in charge of production.

WILLIAM J. BOMAN, formerly with Arvey Corp., has become general plant administrator of Einson-Freeman Lithographing Corp., Fair Lawn, N.J. A. H. SCHMITZ continues as vice-president for production.



William J. Boma



G. Don Davidson, Jr.

G. DON DAVIDSON, JR. has been elected vice-president in charge of sales at Package Products Co., and its commercial printing division, Herald Press, Charlotte, N.C.

WILLIAM R. APPLEBY has succeeded RICHARD M. HUBER as president of Playbill, Inc., New York City printers and publishers of theater programs. Mr. Huber is board chairman.

J. W. WEBB has become associated with Harry Milner Inc., Charlotte, N.C., printers and lithographers.

C. RAY EVANS, JR., with American Colortype Co. since 1946, has been appointed printing division sales manager with headquarters in Chicago.

CARL J. BERGSTROM, president of Rathbun & Bird, Inc., New York City, founder and past president of the Printing Machinists Association, died on Sept. 30 at the age of 62. He was a board member of the New York Club of Printing House Craftsmen and the Printers Supply Salesmen's Guild.

GEORGE C. McWILLIAMS, JR. has been appointed service representative in New York City for Didde-Glaser, Inc., Emporia, Kan.

VICTOR GEDWILLAS has been named eastern district technical service manager for J. M. Huber Corp., Hillside, N.J., ink division. PAUL I. ROGERS, an industrial engineer, has been appointed as a consultant and technical adviser by the Allen Hollander Co., Inc., New York City.

HOWARD E. MARCH has been named manager in the metropolitan New York area of a new retail sales division of Thomas Collators, New York City.

THOMAS J. CARLIN has been named superintendent of the Eastern Corp., Bangor, Me., kraft mill now under construction at Lincoln, Me.

KENNETH MAIRSON has become district representative with headquarters in St. Paul, Minn., for the Sun Supply Co., division of Sun Chemical Corp., Long



Contact you nearest BINGHAM branch for further information.



Home Office CHICAGO ATLANTA CINCINNATI CLEVELAND DALLAS DES MOINES DETROIT
HOUSTON
INDIANAPOLIS
KALAMAZOG
KANSAS CITY
MILWAUKEE
MINNEAPOLIS

NASHVILLE OKLAHOMA CITY PITTSBURGH SEARCY, ARK. ST. LOUIS SPRINGFIELD, O. TAMPA, FLA.

Island City, N.Y. JULIUS F. MAZUR has been appointed district sales representative in Ohio.

HERBERT I. COHEN, credit manager and personnel director, and ROBERT H. BERKOWITZ, sales manager, have been appointed vice-presidents of Central Paper Co., Newark, N.J.

BENNETT GLAZER has joined the New York sales staff of the Haddon Craftsmen, book manufacturers.

TED CROW is being transferred by the Ennis Tag and Salesbook Co. and the American Carbon Paper Mfg. Co. from Ennis, Tex. to call on dealers in Oklahoma City, Okla.

CHARLES J. FILLARE has been appointed assistant to the sales manager of Mosstype Corp., Waldwick, N.J.

BRUCE GENTRY has rejoined the H. Wolff Book Mfg. Co., New York City, in a sales and executive capacity. He formerly was with the firm before World War II.

ROBERT HYLLEBERG has been named sales representative in Milwaukee for Roberts & Porter, Inc., Chicago.

JOSEPH F. SYDLANSKY has been appointed to the New York City sales staff of E. P. Lawson Co.

JACK O. BALDWIN, formerly a Scan-A-Graver sales representative in Southern California, has been appointed assistant to Fairchild Graphic Equipment marketing manager E. P. Tracht.





Jack O. Baldwin

Harry C. Lauchle

HARRY C. LAUCHLE has been appointed supervisor of technical training at Miehle Printing Press and Mfg. Co., Chicago, MACK A. THOMPSON, sales representative, has been transferred from the Chicago area to the Denver area. ROBERT CASHMORE has left the Boston and New York offices to cover upper New York State out of Rochester. PAUL FRIEDRICH, JOHN R. MILLER, and JOSEPH E. HAYES, Miehle erectors and servicemen, are retiring after a combined total of over 120 years of service.

FRANK A. ROSS has joined the engineering department of the Cottrell Co., Westerly, R.I., as sales engineer. He formerly was chief research engineer for Miller Printing Machinery Co., Pittsburgh, Pa.





Frank A. Ross

Joseph Flum

JOSEPH FLUM is heading a new research laboratory at Econo Products, Inc., Rochester, N.Y.

New Cincinnati Craftsmen Club officers are (l. to r.) William Schwartz, U.S. Printing & Litho. Co., first vice-president; Salvatore Buglione, Strobridge Litho. Co., secretary-treasurer; Verne Crane, Nessler & Wagner Co., president, and William Bell, Standard Publ. Co., second veep



GETTING A WONDERFUL RECEPTION

Fox RIVER

In the short time it's been available, ARCTIC WHITE has created a sensation in the paper and printing industries. Thousands of shops are turning out brighter, more sparkling work on it. YOUR jobs will take on new beauty...on ARCTIC WHITE. Eleven grades:

FOX RIVER BOND . FOX RIVER OPAQUE . ENGLISH BOND . NATIONAL BANK BOND . ANNIVERSARY BOND . FOX RIVER ONION SKIN . FOX RIVER OPAQUE ONION SKIN . ANNIVERSARY ONION SKIN . ANNIVERSARY VELLUM . ANNIVERSARY BRISTOL . ANNIVERSARY THIN CARD



Appleton, Wisconsin



NEW LITERATURE

Those interested in literature described are asked to write direct to the company listed in the item

Adhesives for Mylar Film

The E. I. du Pont de Nemours & Co. industrial finishes division offers a technical bulletin on adhesives for Mylar polyester film. The bulletin describes modified synthetic rubber and vinyl types of adhesives and also polyesters, a new Du Pont-developed class which has higher specific adhesion, clarity and color stability, and low color and odor. Tables describing six adhesives for Mylar are included with information on laminations, application, bonding, uses and safety precautions. Copies and experimental quantities of adhesive may be obtained from Room 7018, Du Pont Building, Wilmington 98, Del.

Gravure Copy Film Use Leaflet

Eastman Kodak Co. has produced a data leaflet giving exposure and processing instructions for use with Kodak Gravure Copy Film, an orthochromatic film for commercial photography and graphic arts use. The film is intended for making continuous tone copy negatives and positives for photogravure reproduction and photocopying. Copies are available from the company's Sales Service Division, Rochester 4, N.Y.

Eliminating Metal Build-Up

Metl-Repl Spray is described as being the answer to the problem of metal build-up in typecasting machines. It is a non-toxic, nonflammable, harmless spray which helps to maintain accurate adjustment by eliminating excess wear on molds, vise jaws and mouthpiece. It is recommended for molds and plungers on Linotype and Intertype machines, and for use on Monotype and Ludlow machines. A folder describing this spray is available from Central Typesetting Supply Co., 1016 Cherry St., Philadelphia 7, Pa.

Small Rider Trucks Catalog

A folder is available on electric powered "Ride-A-Man" trucks. Engineering specifications, dimensions and capacities are given. Pallet trucks, high and low lift platform trucks, counterbalanced and outrigger trucks and others are described. Copies may be obtained from the Moto-Truc Co., 1959 E. 59th St., Cleveland 3, Ohio.

Complete Chemco Catalog

A complete price list of products used in the photomechanical reproduction processes is offered by Chemco Photo-



Probably every one of your customers has, at one time or another, experienced delay because their large flat mail matter, sent FIRST CLASS, became mixed with Third Class matter.

To overcome this hazard the United States Envelope Company developed the U.S.E. Columbian® First Class Mailer, printed with a distinctive green "diamond" border and the words "First Class Mail" on front and back. This feature has been accepted by the postal authorities, and all post offices have been alerted to give first class handling to envelopes so printed.

Here is an opportunity for you to "go to town" with an envelope which should become a regular item with many of your customers. The Market is ready, the Post Office is ready, and your U.S.E. Envelope Supplier is ready, with U.S.E. Columbian First Class Mailers in 9" x 12", 9½" x 12½" and 10" x 13" as stock U.S.E. items. U.S.E. Dubl-Grip® Self-Seal® and other suitable large envelopes can also be stock-printed on special order.

Your U.S.E. Envelope Supplier can obtain these First Class Mailers for you mill-printed *complete with corner card*, if your presses are loaded.

Ask for copies of the U.S.E. Columbian First Class Mailer reprint, which will help you sell this new and vital improvement to your customers. Call your Envelope Supplier or write to Advertising Department —



UNITED STATES ENVELOPE COMPANY



SPRINGFIELD 2, MASSACHUSETTS

15 Divisions from Coast to Coast

EP-4

products Co., Glen Cove, N.Y. This 172page illustrated and indexed catalog is the result of three years of research and is expected to be revised each year. Copies are available from regional branch offices.

Folder on R.O.P. Color Printing

Goss Printing Press Co., 5601 W. 31st St., Chicago 50, has produced a folder called "Thoughts on R.O.P. Color." This bulletin is intended for newspapers which are just starting to produce their own color (from art work to plates) and for advertisers who furnish plates or mats to newspapers. It contains advice and information on layout, inks, equipment and

other pertinent information which should be helpful to the inexperienced.

Idea Kit for Building Sales

Linton Brothers & Co., Fitchburg 6, Mass., offers a new series of "Sales Building Ideas." Specimens produced by letterpress and offset with die cuts, tent cards and point of sale display pieces are included to provide business ideas. Copies are available from the company and its dealers.

Rising Letterhead Samples

A portfolio of "New Letterheads of the Season" printed by letterpress or offset, engraved or embossed, is available from Rising Paper Co., Housatonic, Mass. The stock represented is 100 per cent rag content parchment, 25 per cent rag bonds and line marques.

English Specialists in Matrices

An English firm of engravers and type founders and casters has produced a booklet illustrating its facilities and describing its services. These include making typecasting matrices in small quantities to suit any kind of casting machine. The company will design type to customers' specifications and makes special matrices for trade-marks, colophons, and logotypes.

A new aluminum alloy will be used in the near future for making matrices which withstand high pump pressures and will not erode or fill in.

"Type Casting Matrices" may be obtained from Stephen Austin and Sons, Ltd., Caxton Hill-Ware Rd., Hertford, Herts, England.

Challenge Proof Presses

Eleven models of proof presses ranging from the GP press for fine reproduction proofing with power inking to the inexpensive models used by small printers and schools are described in a booklet offered by the Challenge Machinery Co., Grand Haven, Mich. Sizes, shipping weights and other specifications are given. Requests should be for the booklet on "Challenge Proof Presses, Publication F-726."

Skip Wheels and Repeat Cams

A comprehensive, illustrated coverage of principles of skip wheel and repeat cam operation and usage is available from Wm. A. Force & Co., Inc., 216 Nichols Ave., Brooklyn 8, N.Y. This is new section #9 called "Skip Wheels and Repeat Cams," of the "Force Rotary Numbering Heads Operating and Maintenance Procedures Manual."

Automatic Counters, Controllers

Two bulletins on automatic electric counters are available from Counter and Control Corp., 5225 W. Electric Ave., Milwaukee 19, Wis. Bulletin 401-A describes equipment for printers, paper mills and converters, die cutters and box plants. Model C-3AW with cyclo-monitor control for universal counting, and model C-3W with Acratrol counter for general purpose counting are illustrated and explained.

Bulletin 600 contains specifications, diagrams and description of Series C-35 Acratrol 5-position count selector and controller.

Book on Planning Catalogs

"Planning the Production of Catalogues" is a 56-page illustrated book offered by Howard Smith Paper Mills, Ltd., 407 McGill St., Montreal, Que. It is a comprehensive coverage of catalog plan-

Blatchford Catch Anchors Plates

Tight ... prevents slippage during press runs

- 1. Hold-down action of beveled jaw clamps plate edge to Base.
- 2. Key-operated screw locks Catch jaw tight against plate.
- 3. Forged steel yoke, bearing against *top* of hole, directly opposes pressure on jaw, locks Catch (and plate) to Base.
- **4.** Toe of Catch hooks under ledge in hole . . . prevents work-ups.





Blatchford Accessories

- 1. Two special Catches...a ratchet Catch for fast book-work...a spring Catch for use on drilled rotary cylinders.
- 2. Quick-adjustment screw-locking side-guide markers.
- 3. Bumpers* .943" high to prevent offset or sticking in carton work.
- 4. Register cutting die holds sheet while laying and registering plates.
- 5. Round cutting dies 1/4" and 3/8" (.918 high).
- 6. Scoring, cutting, and perforating rules (with guards) up to 30" long.
- 7. Specially designed shifter moves largest plates with ease and security.

*Bumpers and markers also made with numbered and lettered heads.

The Blatchford Plate Mounting System is engineered to save you

is engineered to save you time and money in all pressroom operations. Write for new booklet. BLATCHFORD DIVISION * NATIONAL LEAD COMPANY * Atlanta, Chicago, Cincinnati, Cleveland, Dallas, St. Louis; Eastern U. S. and New England; E. W. Blatchford Co., New York City; Pacific ⊕ Coast: Morris P. Kirk & Son, Inc., Los Angeles, Emeryville (Calif.), Portland, Seattle, Phoenix, Salt Lake City,

Blatchford Base

Magnesium or Standard Metal



 $\label{lem:controls...} A decanced design pays off-for you. ATF Chief 22's quickly-set controls... automatic wash-up and self-lubrication... Adjustomatic stepless speed control and other exclusive features mean that...$

while other presses are being set up... it's off – and running up profits!

Thinking of going into high-quality offset? Want to branch out from letterpress? Looking for the ideal job press in the 22" range?

Pressmen everywhere will testify to the fast and easy set-up, smooth operation and precision production of the ATF Chief 22.

Some like the advanced inking and dampening systems. Some like the wide range of stocks and sizes it handles. Some like the superior work for which it's famous. And *all* stress one major advantage:

no press in its range touches the Chief 22 for fast getaway. The Chief 22 is often in full production while other presses are still being set up—greatly increasing your output and profit on average offset runs.

Set it and forget it! The practical running speeds, teamed with sturdy construction and ease-of-operation insure one smooth run after another, job after job turned out with maximum quality and minimum up-keep problems.

Before you buy—check the field. We're positive that Chief 22's proved capacity for better printing—and more of it—will sell itself. For further information, drop a card, today, to:

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ning from the original purpose of the project through its various stages of planning layouts, choosing type and method of printing, paper, kind of binding, and other pertinent details.

Spray Method for Gear Protection

Bulletin No. 60-A on spray lubrication systems for open gearing and slide surfaces is available from the Farval Corp., 3249 E. 80th St., Cleveland 4, Ohio. Manual and automatic systems and component equipment with schematic layouts are described and illustrated.

Deckled Papers From Canada

A folder of sample papers is available from Howard Smith Paper Mills, Ltd., 407 McGill St., Montreal 1, Que. Carlyle Japan is a rag-content deckle-edged paper recommended for booklets, menus and reports. It is suitable for offset and letterpress. Byronic Text comes in eight colors, has deckled edges, and is available in book and cover weights.

Oil Distribution Systems

A new brochure, Bulletin 4A, which describes and illustrates distribution systems for all types of Bijur automatic lubricators may be obtained by writing "Service," Bijur Lubricating Corp., 151 W. Passaic St., Rochelle Park, N.J. The planning of systems with application to a wide range of machinery is given. Analysis of oil distribution and how systems are engineered to provide the correct oil film to individual lubrication points are topics covered with discussions of component parts of the systems.

Safe Use of Flammable Liquids

The first three sections of a continuing series on safe plant use of flammable liquids are available under the title, "Flammable Liquids, their characteristics, hazards and safe handling."

In practical, nontechnical, illustrated form, the first section deals with the characteristics of flammable liquids and the invisible vapors they give off. Their control is covered in the second section; actual plant procedure in storing and dispensing them in the third.

Those requesting this series will receive a cover binder and will be on a list to receive future issues. They may be obtained from R. J. Andersen, Editor, Technical Services Publications, Protectoseal Co., 1920 S. Western Ave., Chicago 8.

Elwell-Parker Power Trucks

The Elwell-Parker Electric Co., 4205 St. Clair Ave., Cleveland 3, Ohio, offers a folder illustrating and describing its Cascade load clamp and side shift and rotating attachments for its line of powered industrial trucks. Various load clamps, rotating and pallet forks, and load arms are covered along with specification tables of the attachments.





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United

Graphic Arts Education— College or Printing Plant?

(Concluded from page 73) pending on the facilities of the institutions themselves. Several schools operate at junior college level, with two- or threeyear programs.

The Rochester Institute of Technology, whose Department of Printing has grown remarkably in the last ten years, began as a two-year school. Now it confers an Associate in Applied Science degree for three years' work, and a B.S. for the fouryear program.

Is a college education valuable to a printer in a small shop? I would say it would be very helpful, since the smaller plant needs a man whose training is broad enough to be put to use in a variety of

This is not to say that a college is the best place to train a Linotype operator or a compositor, but the graduate of such instruction is certainly more adaptable to any job and should quickly attain a journeyman's competency.

The printing industry ranks high among all manufacturing industries in the number of establishments-over 30,000. Most of these are small plants. They are small because they have been run by individuals with limited specialization.

The continued growth of colleges in the United States will eventually assure the position of the college-trained person in virtually every industry, much in the same way that the person with a high school education supplanted the grade school graduate.

With the graphic arts industry on the threshold of new technological advances, college training offers the greatest opportunities for young people about to begin their careers. Actually, this concept is not limited to the printing industry, but is common to all. The dream of every American parent is to guarantee his child a better education than his own.

Lastly, will the B.S. degree make a better compositor or pressman or platemaker out of a man? The answer is still yes, particularly if the individual is looking to the future. Of course, this is not true in every instance at present, but I am sure that in the next few years it will be.

It must be remembered, too, that the benefits of higher education go far beyond the immediate goal of an acquired skill, and contribute toward the growth of the individual as a person and as a citizen.

Heidelberg Gives Free Classes

Two weeks of free instruction in cylinder press operation were given recently by Heidelberg Eastern, Inc., at the Glendale, Long Island, N.Y., showrooms.



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- Perfect Number Sequence
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NONPAREIL MODEL

For general use on large diameter cylinder, bed and platen type presses. Roman or Gothic figures.

5-wheels - \$24.00* 6-wheels - 26.00* 7- and 8-wheelsprices on request



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For use where room for numbering machine is limited i.e. stamps, coupons, tickets, etc.

#115 - 5-wheel Roman \$37.00*





LOCK-WHEEL MODEL

For small diameter cylinder, high-speed presses. Roman and Gothic figures.

5-wheels - \$29.00* 6-wheels - 31.00* 7- and 8-wheelsprices on request



RIGHT ANGLE ROTARY MODEL

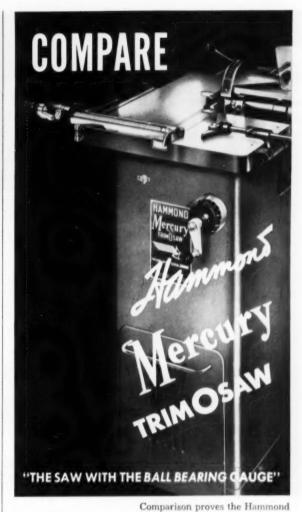
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*Removable slide plunger \$1.00 additional – all prices F.O.B. Brooklyn, N. Y.



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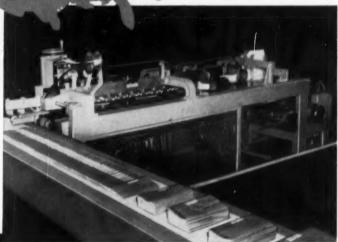
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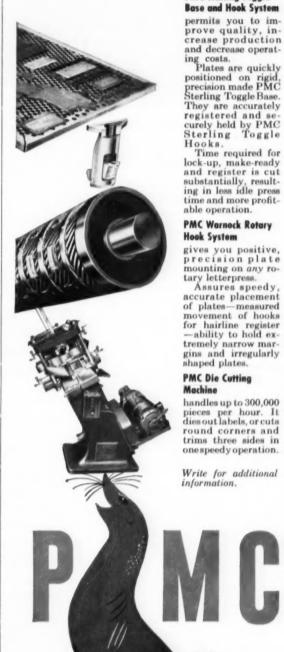
Forms will close December 21st for the 1957 Annual Directory Number of Canadian Printer and Publisher - which is Canada's only graphic arts buying guide.

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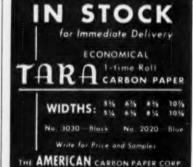
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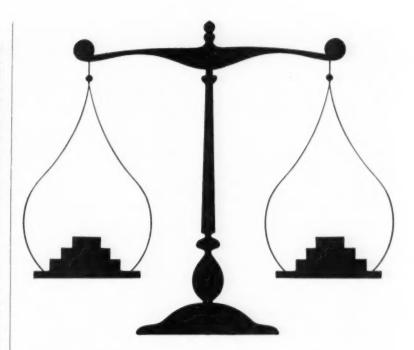
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How to keep composing-room metals in balance

1 Replace every pound of dross with one pound of Federated Mor-Tin. [®]

This maintains balances of both total quantity and the ingredients which are lost most readily by drossing.

2 Check your re-melt practice occasionally. Close supervision of temperature by pyrometer will help insure quality of re-melted metal and result in a minimum of dross.

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THE LAST WORD

BY WAYNE V. HARSHA, EDITOR

★ THERE ARE NO PEOPLE in the world more independent than Vermonters. We heard about two Boston newspaper men who went up to Tunbridge to get material for a Sunday feature story. They showed their press cards. The ticket taker said they'd have to pay to get in.

"But we're going to write up the Fair in our paper," they protested.

"If it's good enough for you to write up, it's good enough for you to pay to get into," was the reply.

They paid!

- ★ THE FIRST VISITING CARDS, we read somewhere the other day, were a bright red, often as large as 18 inches square, with the name either hand-lettered or printed in gold. Custom gradually made them smaller and smaller and whiter and whiter. Today's visitors drop in unannounced and say: "Anybody home?" Personally, we'd prefer a continuing stream of bright red cards, any size—printed ones, that is.
- ★ STEVE L. WATTS, WHO RETIRED two years ago after serving American Type Founders for more than 35 years, is now publishing, editing, composing, press-running and printer's deviling "The Pastime Printer."

His first opus, distributed at a recent meeting of the Type Directors Club in New York City, is a four-page folder greeting his many friends, discussing kerning and nonkerning type faces, and sharing "scuttlebutt" about the Watts family's Skyline Bend farm in Front Royal, Va.

That's where Steve has a just-for-the-fun-of-it private printing plant. Handsetting four pages is no new experience for him. He played around with type when he, like other boys, wore short pants.

His No. 1 is "an omnibus missive to allay apprehension that shack-happiness or the vicissitudes of life in the wilderness" could account for his silence which he assumed his friends regarded as unusual. They had predicted that "the tedium of quiet existence in the boondocks would send us skyhooting back to our accustomed orbit." That's just a sample of Steve's free-wheeling style.

Outdated faces and eccentric composition may astound typophiles, but Steve will do the best he can with the tools he has. It will be easier to do his best now that he has the motor on his press running forward instead of backward. And he now has "three-speed trifocals to make it easier to stick 6-point type."

"The Pastime Printer" comes out "whenever the spirit allows." Getting on its mailing list is "sans obligation." Its one-man staff may be addressed in care of Box 226, Front Royal, Va.

★ DAT OLE DEBBIL is with us again. To give or not to give Christmas gifts to customers. Where do you start and when do you stop? The whole thing has become such an objectionable practice to some companies (not necessarily printers) that they have taken to issuing firm but diplomatic letters like this one sent out by the Sutherland Paper Company of Kalamazoo, Michigan: Dear Friends:

For some years past we have been confronted with problems arising from the practice, which has now become very general in business, of the giving of remembrances and presents at Christmas time.

We are very happy in the friendly relationship which exists between our company and those who supply us with materials and services. We appreciate the friendly spirit in which this practice of making Christmas presents has grown up and we do not wish to appear ungracious or ungrateful.

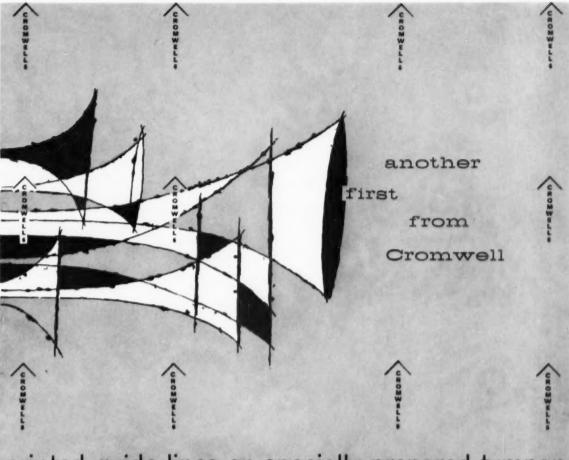
Nevertheless, the practice has become very extensive and we feel that we must ask you to be good enough to omit from any such Christmas or other gift list as you may have, the names of any employees of Sutherland Paper Company. The handling of this situation will call for great tact on the part of our own employees and understanding on the part of our suppliers.

In this effort we ask your cooperation which will of itself be evidence of the good will and friendliness which you bear towards our company. For this we thank you and wish to express our appreciation to those of you who cooperated with us last year in this matter.

Sincerely yours, William Race, President

- ★ YE COUNTRY EDITOR ONCE SAID: This printing business isn't all it's cracked up to be. We ordered several phonts oph very nice type, but the outphit came without any ephs or cays. This maxe it hard, but we will try to get along without them as best we can. We don't lique the loox oph this cind oph of spelling any better than you, but mistaques will happen and iph the ph's and c's, and the x's and que's hold out, we shall ceep (sound the 'c' hard) going aphter a phashion till the new sorts arrive. It's no joque.
- ★ THERE'S A SMALL TOWN in Wales named Llanfair-pwellgwyngyllgogerycheyrndrobwellandtsiliogogogoch. Literally translated, this 58-letter word means Church of St. Mary in a hollow of white hazel near a rapid whirlpool and near St. Tysilio's church which is near a red cave. A friend of ours would have moved there, he told us, but he couldn't find a printer to design a letterhead for him.





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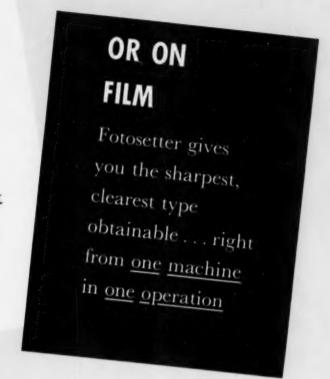
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